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### **CONTENTS**

1	OPPORTUNITIES IN THE SCHEMES OF DIGITAL INDIA <i>Dr. K.K Verma &amp; Jyoti Singh</i>	01-06
2	INDIAN TEXTILE INDUSTRY: CHALLENGES AND OPPORTUNITIES <i>Dr. Rakesh Kumar Jhamb</i>	07-11
3	A COMPREHENSIVE STUDY ON BLUE-CHIP COMPANIES IN INDIA DURING POST LIBERALIZATION ERA: INDIA'S ECONOMIC GROWTH <i>Ashish Kumar &amp; Abhishek Tripathi</i>	12-16
4	SECTORAL AND SUB-SECTORAL DISTRIBUTION OF NPA AMONG PUBLIC AND PRIVATE SECTOR BANKS <i>Ananya Bhatia &amp; Dr. Jagdeep Kumar</i>	17-26
5	DIRECT MUTUAL FUNDS VS. REGULAR MUTUAL FUNDS: A CONCEPTUAL ANALYSIS <i>Dr. Shib Pada Patra</i>	27-29
6	AI IN ADVERTISING: WITH REFERENCE FROM DEVELOPING TOMONITORING AND EFFECTIVENESS <i>Dr. Kuldeep H. Jobanputra</i>	30-36
7	INDIA'S BANKING SECTOR ANALYSIS AFTER COVID-19 <i>Mr. Roop Singh Gehlot &amp; Dr. Mangu Ram</i>	37-43
8	CRITICAL ANALYSIS OF CARBON MARKET <i>Pooja Choudhary</i>	44-48
9	CORRELATION BETWEEN CAPITAL STRUCTURE AND PROFITABILITY: A CASE STUDY ON CIPLA LIMITED <i>Priya Sharma &amp; Dr. M.L. Agarwal</i>	49-58

10	ARTIFICIAL INTELLIGENCE IN SURGICAL INSTRUMENTS <i>Sagarika T H, Sanjana N &amp; Dr. Anitha.s</i>	59-64
11	A STUDY TO ANALYZE ECONOMIC POSITION OF ASPIRING WOMEN ENTREPRENEURS IN AMRAVATI CITY <i>Sonali S.Gosavi &amp; Dr. Prof. K. G. Dhoble</i>	65-68
12	FINANCIAL LITERACY AMONG PEOPLE OF RURAL AREA IN JAIPUR DISTRICT <i>Vijesh Verma &amp; Dr. Jagan Singh</i>	69-74
13	THE ROLE OF DIGITAL CURRENCIES IN ADVANCING A CASHLESS ECONOMY: OPPORTUNITIES AND CHALLENGES <i>Pankaj Grover</i>	75-79
14	CAPITAL MARKETS, TRADING AND PORTFOLIO MANAGEMENT SERVICES <i>Sahdev Gujrati &amp; Dr. Satpal Mehara</i>	80-86
15	जीएसटी (माल एवं सेवा कर) परिप्रेक्ष्य में भारतीय अर्थव्यवस्था: एक अध्ययन <i>आकांक्षा एवं डॉ. चन्द्रकांत अवस्थी</i>	87-92
16	राष्ट्रीय अर्थव्यवस्था के विकास के संदर्भ में पर्यटन के प्रकार और प्रेरक तत्व <i>डॉ. मनोज कुमार सेठिया</i>	93-99



## OPPORTUNITIES IN THE SCHEMES OF DIGITAL INDIA

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Dr. K.K. Verma\*  
Jyoti Singh\*\*

### ABSTRACT

*The Digital India Programme was launched on July 1, 2015 by Hon'ble Prime Minister Shri Narendra Modi. These schemes initiatives are included e-Governance, education, digital infrastructure, agriculture, health, manufacturing, manpower power skill. The present study is entirely based on secondary data which have been collected from government's official website, journals, newspapers and related published studies and books. The vision of digital India discusses as Digital infrastructure as a core utility to every citizen, Government services on demand, and empowerment of citizen. The digital payment Index has taken place from March, 2022. The significant growth of digital payment across the country in recent years increased. In this new payment mode, there are about nine pillars of digital India i.e. Broadband Highway, Universal Access to Mobile Connectivity, Public Internet Access Programme, e-Governance-Reforming Government through Technology, e-kranti-Electronic Delivery of Services, Electronic Manufacturing, IT sector for Job, Early Harvest Programme and detail Information for All above. The Common service centres offered different services which are Aadhar services, educational services, health services, financial inclusion, skill development, G2C services, B2B services and other services.*

**KEYWORDS:** Digitalization, Pillar, Thirty Digital Themes, Digital Payments, Digital Services.

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### Introduction

Digital India is a flagship program of the government of India with a vision to transform India into a digitally empowered society and knowledge economy. The Programme was launched on July 1, 2015, by Hon'ble Prime Minister Shri Narendra Modi. The objective of Digital India Group is to come out with innovative ideas and practical solutions to realise Hon'ble Prime Minister Narendra Modi's vision of a Digital India. Digital India is an umbrella programme that covers multiple Government Ministries and Departments. It weaves together a large number of ideas and thoughts into a single, comprehensive vision so that each of them can be implemented as part of a larger goal. (source: <http://digitalindia.gov.in>.)

Digital India is a campaign launched by the Government of India in order to ensure that Government services are made available to citizens electronically through improved online infrastructure and by increasing internet connectivity or making the country digitally empowered in the field of technology and technique. The initiative includes plans to connect rural areas with high-speed internet networks. It consists of three core components: the development of secure and stable digital infrastructure, delivering government services digitally, and universal digital literacy. It is both an enabler and beneficiary of other key Government of India Schemes, such as Bharat Net, Make in India, industrial corridors, Bharatmala and sagarmala. (source: <https://en.m.wikipedia.org>).

### Scope of Digital India

- To prepare India for a knowledge future.
- On being transformative that is to realise IT (Indian Talent)+IT (Information Technology)=IT (India Tomorrow).

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- Making technology central to enabling change.
- On being an umbrella Programme-covering many departments

#### Objectives of Study

- To find out the opportunities provided by digitalisation
- To find out the schemes launched by the government of India and their functions

#### Research Methodology

The research methodology is descriptive cum analytical in nature. This present study is entirely based on secondary data sources which have been collected from the government's official website, journals, newspapers and related studies.

#### Government Digital Initiative

Key Areas	Initiative	Key Areas	Initiative
eGovernance	Common Services Centre	Agriculture	eNAM
	Digital Land		Soil Health Card
	DigitalLocker		MKisan
	Direct Benefit Transfer	Health	Rashtriya Swasthya Bima Yojana
Government e-Marketplace	E-hospital		
Education	SWAYAM	Manufacturing	Phased Manufacturing Programme
	National Digital Library	Finance	Pradhan Mantri Jan Dhan Yojana
	National Knowledge Network	Power	UJALA
Digital Infrastructure	Sectoral CERT	Skills	PMGDISHA
	MeghRaj		

#### Public Digital Platform

<b>AADHAAR UID</b>	12-digit unique identification number based on biometric and demographic data.
<b>E-SIGN</b>	Replaces manual paper-based signatures by allowing Aadhaar holders to electronically sign documents.
<b>e-KYC</b>	Paperless KYC process, verifying subscriber's identity and address electronically through Aadhaar.
<b>DIGILOCKER</b>	The platform for issuing and verifying documents digitally using cloud storage linked to Aadhaar.
<b>UPI</b>	Enables all bank account holders to send and receive money instantly using smartphones, without bank account information.
<b>GSTN</b>	Unified indirect tax administration platform for the entire country to handle invoices, returns, registrations, and payments

#### Manufacturing Automation and IOT-based Advanced Analytics

Automation and IoT-based advanced analytics have the potential to unlock huge productivity gains for productivity through performance benefits, including greater throughput, higher quality, improved safety, reduced variability, less waste, and higher customer satisfaction.

Manufacturers use advanced analytics to boost productivity in factories	Harley-Davidson, Stanley Black & Decker, Daimier Trucks North America
Process automation is used by different players in India	Bajaj, Lumax, Ford Motor, Tata Motors,

#### Global and Indian Digital Innovators

<b>Telecom</b>	Jio, Airtel, Vodafone
<b>Global platform</b>	Google, Android App
<b>Social media and instant messaging services</b>	WhatsApp, Facebook
<b>E-commerce</b>	Amazon, Flipkart
<b>Digital Payment</b>	HDFC Bank, SBI, Paytm

#### Vision of Digital India

<b>Digital Infrastructure as a Core Utility to Every Citizen</b>
<ul style="list-style-type: none"> <li>• Availability of high-speed internet as a core utility for delivery of services to citizens</li> <li>• Cradle to grave digital identity that is unique, lifelong, online and authenticable to every citizen</li> <li>• Mobile phone &amp; bank account enabling citizen participation in digital &amp; financial space.</li> <li>• Easy access to a common Service Centre.</li> <li>• Safe and secure cyber -space.</li> </ul>

<p><b>Government &amp; Services on Demand</b></p> <ul style="list-style-type: none"> <li>• Seamlessly integrated services across departments or jurisdiction</li> <li>• Availability of services in real-time from online &amp; mobile platforms</li> <li>• All citizen entitlements to be portable and available on the cloud</li> <li>• Digitally transformed services for improving ease of doing business.</li> <li>• Making financial transactions electronic &amp; cashless.</li> <li>• Leveraging Geospatial Information Systems (GIS) for decision support systems &amp; development.</li> </ul>
<p><b>Digital Empowerment of Citizens</b></p> <ul style="list-style-type: none"> <li>• Universal digital literacy</li> <li>• Universally accessible digital resources</li> <li>• Availability of digital resources/services in the Indian language</li> <li>• Citizens not required to physically submit Govt. documents/certificates.</li> </ul>

**Digital Payment Index for March, 2022**

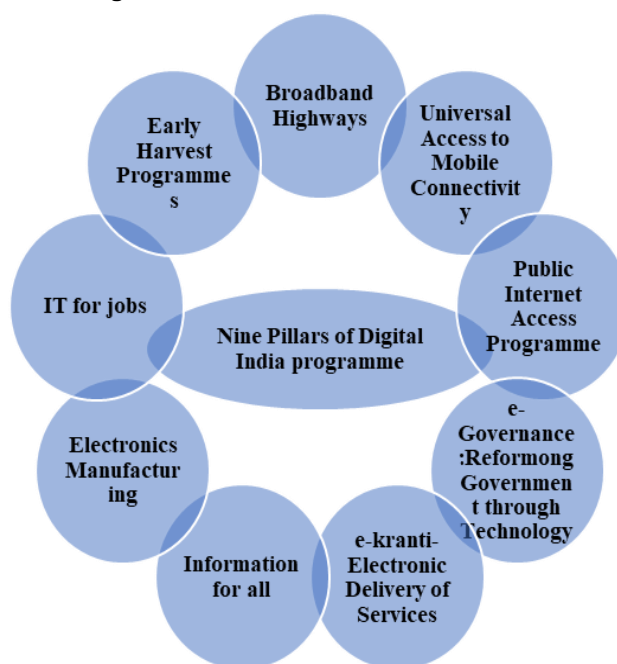
Period	RBI-DPI Index
March -2018 (Base)	100
March 2019	153.47
September 2019	173.49
March 2020	207.84
September 2020	217.74
March 2021	270.59
September 2021	304.06
March 2022	349.30

Source: www.rbi.org.in

The Reserve Bank had announced construction of a composite Reserve Bank of India -Digital Payments Index (RBI-DPI) with March 2018 as base to capture the extent of digitalisation of payment across the country. The index for March 2022 stands at 349.30 as against 304.06 for September 2021, which was announced on January 19, 2022. (Source: www.rbi.org.in)

The RBI-DPI index has demonstrated significant growth representing the rapid adoption and deepening of digital payments across the country in recent years.

**Nine Pillars of Digital India Programme**



Source: india.gov.in

- **Broadband Highway:** This cover three sub components, namely Broadband for All-Rural, Broadband for All -Urban, and National Information Infrastructure.
- **Universal Access to Mobile Connectivity:** This initiative focuses on network penetration and filling the gaps in connectivity in the country.
- **Public Internet Access Programme:** The two sub components of public Internet Access programme are Common Services Centres (CSCs) and post offices as multi-service centre.
- **e-Governance-Reforming Government through Technology-**Government process Re-engineering using IT to simplify and make the government processes more efficient is critical for transformation to make the delivery of government services more effective across various government domains and therefore needs to be implemented by all Ministries/Department.
- **e-kranti-Electronic Delivery of Services:** There are 10 Mission Model Projects have been added to e-kranti by Apex committee are: E-Education, E-Health, Technology for farmer, Technology for security, Technology for Financial Inclusion, Technology for Justice, Technology for planning, Technology for cyber security, One of the highlight of Digital India is to intensity the way into information for countries by endorsing pen data stages and open basis programmes and applications.
- **Electronic Manufacturing:** These includes making efforts in the direction of reaching remaining zero imports in electronic items for example FABS, Set Top Boxes, VSATs, Mobiles, Consumer electronics and so on.
- **IT for Job:** It facilitates the training of individuals from smaller towns and villages for IT sector jobs.
- **Early Harvest Programme:** This comprises numerous Programmes including mass messaging platforms and app for broadening information with respect of government programmes, E-greeting, biometric attendance in government offices, Wi-Fi in all universities, public Wi-Fi spots, replacing book by E-books, SMS built, disasters alerts, a national gateway for lost and found children etc.
- **Information for All:** The development of an open data platform was initiated by government in order to offer various projects and related data to all common people through the internet platform (data gov.in). My Gov.in,a website launched by the government to engage citizen to get their suggestion and ideas over the online platform.

### Thirty Digital Themes

<b>A. 21<sup>st</sup> -Century IT infrastructure and Software Capabilities</b>	
1	A vibrant IT/BPM industry with significant reskilling of its workforce in digital technologies of the future.
2	State-Of-the-art cybersecurity, robust laws and policies for policies for secure and safe collection, and storage of personal data.
3	Real-time data visualization and deep analytics to track national projects and provide open data platforms for innovation.
4	Ubiquitous Coverage of broad-based, affordable, high-speed internet connectivity through a combination of fibre to the home (FTTH) and wireless technology.
<b>B. E-governance of the future</b>	
5	Government e-Marketplace adopted by all government departments/agencies, with comprehensive coverage of buyers, sellers and service providers and end-to-end digital enablement from tendering to payment and fulfilment.
6	Digital Land 2.0 to accelerate property
7	National document and data exchange (using digital locker) to facilitate the exchange of documents/ data and enables straight-through verification/compliance for multiple individual and business needs (e.g., eKYC, employment, and utilities)
8	Digital technologies to improve urban e-governance for local bodies and satisfied citizens to address challenges of congestion, security, and utility management
9	Comprehensive Direct Benefit Transfers to eliminate losses and inefficiencies in disbursement of benefits and subsidies across wages ,food ,fertilizer, cooking gas ,power , and other areas.
10	Profitable digital service provider ecosystem (CSC in every gram panchayat) by expanding the range and volume of G2C and B2C goods /services delivered (e.g., e-commerce, insurance, education, health and agriculture)



<b>C. Healthcare for All</b>	
11	Universal electronic health record for every Indian capturing and making available clinical encounters, to achieve a rapid, accurate and affordable healthcare value chain (across drug discovery, diagnostics, delivery, and financing)
12	Tech-enabled health delivery with e-health centers, tele-consultation, tele-diagnostics, analytics-based protocols, remote monitoring, feedback to patients and caregivers
13	Universal health insurance platform for rapid, mass, low-cost customer onboarding, provider, and claims interface for health protection schemes
<b>D. Quality Education for the Future</b>	
14	Integrated digital education platform with customizable local-language content created as an open societal platform for teachers, education, learners, education providers and all stakeholders
15	Digital content delivery and learning in schools and higher education institutes through online lessons, video, simulations, continuous assessment and adaptive learning systems, supported by trained teachers.
<b>E. Energy for all</b>	
16	Digitally enabled power access to every household while improving the financial condition of DISCOMs
17	Grid automation and optimization using digital technologies to integrate renewable energy sources and improve grid reliability
<b>F. Next-generation financial services</b>	
18	Digitally payment solutions across the full spectrum of government, business and consumer payments in all states of India to transition to a less-cash economy
19	Flow-based lending and advanced credit underwriting for MSMEs using GSTN and other data for pricing and credit risk management
<b>G. Doubling farmers' income</b>	
20	Digital financing and insurance payouts (credit, insurance, payments, risk management) using data from digitized land records, crop-cutting experiments, satellite images fertiliser DBT, digital sales, and sensors
21	Precision agriculture know-how sharing through multiple channels based on multiple existing and new data sources (soil health cards, weather data, farm/tractor-based sensors)
22	Online agriculture marketplaces leveraging wholesale markets and buyer-seller platforms, providing farmers and traders with timely information on local prices, e-warehousing receipts, and transaction guarantees through direct and e-enabled channels
<b>H. Make in digital India, make for India, make for the world</b>	
23	End-to-End digital supply chain, e-enabled trade and commerce across manufacturers, SME vendors, and wholesale/retail trade, with transition to GSTN, online inventory management, and growth of ecommerce
24	Integrated logistics platform to fully integrate and share information on the transportation of physical goods
25	Efficient transportation through digital platforms for passenger transportation such as cab-hailing, and similar sharing-economy applications.
26	IoT-based advanced analytics and automation to improve manufacturing processes with plant availability, yield, and throughput, and save costs through asset management
27	Boost electronics manufacturing and exports from India by facilitating financing, investment in R&D, and building best-in-class infrastructure
<b>I. Jobs and skill for the future</b>	
28	Building skills with the updated curriculum (across multiple use cases such as remote ops and advanced analytics) rolled out in all colleges and it is in partnership with industry, leveraging digital technology (MOOCs and AR/VR)
29	Online talent marketplaces to provide employers, job seekers, and skill trainers with an array of content, job market information, and supply and demand matching platforms form a variety of occupations.
30	Digitally enabled jobs through investment in the next wave of BPO in small-town and semi-urban India, the sharing economy, on-demand workers, and new digital value chains in healthcare, agriculture, and other services.

### Service Offered by CSC

Common Services Centres (CSCs serve as digital access points for delivering e-services to citizens, mainly in rural India.

Aadhar Services	Aadhar enrolment and print, Mobile and demo-graphics updates, e-KYC, seeding and authentication
Educational Services	Digital education, e.g. Cyber Gram (digital literacy for minority communities), Courses under National Institute of Open Schooling, Computer courses under National Institute of Electronics and IT, Animation and Tally courses, Coaching -IIT, Civil services, Financial/Legal literacy, University services IGNOU
Health Services	Tele-medicine-Allopathic, Ayurvedic, Homeopathic, JAN Aushadhi (generic medicines at affordable prices), Diagnostic services

Financial Inclusion	Banking Services-New account, Deposit, Withdrawal, Remittance, Insurance-Life insurance, General Insurance, Pension, Cash withdrawal/deposits using Aadhar Enabled Payment System.
Skill Development	L&T & National Skill Development Corporation Courses, Others-Electronics, Motor mechanic, Mobile repair National Optical Fibre Network, Health adviser.
G2C Services	Central Govt. Services-PAN card, passport, income tax return, Voter registration, Employment services, e.g. labour registration, Application for toilets under Swachh Bharat Abhiyan (clean India campaign) Applications PM Awas Yojana (affordable housing scheme), Agricultural services-Soil health card State Govt. Services-e-District/State e-governance Service Delivery Gateway -land records, ration card, Birth /death certificate, Income /caste /domicile certificate
B2C Services	e-Recharge, Tour & travels, Sale & purchase of seeds farmer equipment, e-Commerce-CSC Bazar, VLE Bazar, Wi-Fi Choupal, Products from -Patanjali, Samsung, Crompton Greaves, Hewlett-Packard, IFFCO.
Other Services	Electricity new connection and bill payment, IRCTC (railways) services, Bharat Bill Payment System

### Findings

Based on the above information, it is found that government launched various schemes to make India digitally connected with broadband to both rural and urban. The Government plays an important role to make India Digitally connect one corner to another. The field of digitally initiatives such as e-Governance, Education system digitally as SWAYAM, National Digital Library, agriculture such as eNAM, E-Hospital, Pradhan Mantri Jan Dhan Yojana, Sectoral CERT etc. Public Digital Platform Aadhaar UID, E-sign, eKYC, Digilocker, UPI, GSTN, and to fulfil the vision of Digital India as Digital Infrastructure as a core utility to every citizen, Governance & Services on demand and Digital Empowerment of the citizen. As per RBI publications the Digital Payment Index report shows a significant growth in the adoption of Digital media transaction with effect from March 2018 to March 2022 which increased from 100 points to 349.30 points. The government progress work is going on the nine pillars of the digital media with the help of Thirty digital sub-themes to make the success of Digital era.

### Conclusion

It is concluded from the study that government play a significant and effective role to make the easier way of work by following digital media for different purposes i.e. money transfer and payment, information about different rules and regulation etc in the short period or without delay. With the introduction of the digital system in education, get the benefit of education through online who have not possible for go to offline attend the coaching. They can learn and listening the recorded coaching subject matter which is available on the different portal/application. The eNAM facilities provide benefit for farmers who can sell and purchase their goods through online platform. E-hospital facilities are also available to the public and can get benefit online at everywhere in country including interaction between doctor and patient.

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5. <https://india.gov.in>.



## INDIAN TEXTILE INDUSTRY: CHALLENGES AND OPPORTUNITIES

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Dr. Rakesh Kumar Jhamb\*

### ABSTRACT

*The textile industry has a great influence in the economic development of India. It is the second largest employer after the agriculture sector. Through its contribution to industrial production, employment generation and export earnings, industry plays an important role in the Indian economy. The Indian textile industry is multi-fiber based, using cotton, man-made and synthetic fibers, silk, wool and jute. One of the major advantages of the Indian textile industry is the abundant availability of raw materials. Cotton is one of the major raw materials for the Indian textile industry. India is the second largest producer of cotton and silk in the world. The industry's workforce is dominated by women with more than 70% of the workforce. The Indian textile industry is broadly divided into two segments- the organized sector comprises spinning, apparel and clothing. These include handicrafts, handlooms and sericulture in the modern technology for production and the unorganized sector which is generally operated on a small scale and in traditional ways. Unlike other major textile-producing countries, India's textile industry consists mostly of small-scale, non-integrated spinning, weaving, finishing and garment-making businesses. This unique industry structure is primarily a legacy of government policies that promoted labor-intensive, small-scale operations and discriminated against large-scale firms. The industry is estimated to provide about 10% of the country's total manufacturing output, 2% of the national GDP, 15% of the country's export earnings, 7% of industrial production and provide employment to about 45 million people in the country.*

**KEYWORDS:** *Textile Industry, Problems, Opportunities, Exports, Employment, Growth.*

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### Introduction

India is one of the largest producers of textiles and apparel in the world. Consumers around the world import textiles from India because of the high quality fabrics and affordable prices. According to a study, the value of the Indian textile industry by 2021 is \$223 billion. The textile industry is the largest producer of cotton and jute, the second largest in silk, and 95% of hand-woven fabric globally is from India. The textile industry is the second largest employer in India after the agriculture industry. If we talk comparatively, then after agriculture, textile business in India only provides jobs, money and employment to a large number of people. The best thing about this industry is that it is a self-sustaining industry from the very beginning, whether it is manufacturing of raw material or increasing the decoration of that material and selling it, this industry strengthens and empowers India's economy at every level. An important fact is that the business of all the famous families of India like Tata, Birla and Ambani started and flourished from this textile industry only.

No one has the data that since when we and you mean the whole human species has been wearing clothes, but some studies say that humans have been wearing clothes since the Stone Age. If we talk about the textile history of India, then our culture and our people were far ahead in the Harappan civilization. This proved that the relationship between clothes and us humans is millions of years old, but if we talk about today's era, then the manufacturing of these clothes started in England at the time of industrial revolution. When for the first time in 1733 the flying shuttle, flyer and bobbin system and the revolutionary invention of the roller spinning machine in 1738, a strong work was done to promote the textile business. After the invention of the spinning machine in 1738, Louis Paul also

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developed the carding machine in 1748 and the spinning jenny in 1764. Then exactly 20 years later, in 1784, the power loom was invented. That's why the textile industry got a lot of strength due to the industrial revolution in the 18th century and today it is such a prosperous industry all over the world. If we talk about history, in the year 1818 itself, a cloth mill was started near Kolkata, but in reality, the textile industry gained momentum after 1850, when in 1854, a Parsi merchant established the Bombay Cotton Mill. After that, by the end of the 20th century, about 178 cloth mills started in India and this textile industry continued to grow.

### Structure and Growth of the Indian Textile Industry

India's textile industry is one of the largest industries in the economy. India's textile industry is also important in the global context, ranking second only to China in the production of both cotton yarn and fabric and fifth in the production of synthetic fibers and yarns. Unlike other major textile-producing countries, India's textile sector is characterized by mostly small-scale, non-integrated spinning, weaving, textile finishing and apparel businesses, many of which still use antiquated technology. Ahmadabad, Mumbai, Surat, Rajkot, Indore and Vadodara are major places for cotton industry, while Bihar is known for jute production, parts of Uttar Pradesh are known for woolen and Bengal is famous for cotton and jute industry. Tiruppur, Coimbatore and Madurai are known for the production of hosiery and Bengaluru, Mysore and Chennai are known for silk fabrics.

Some, mostly large, firms operate in the "organized" sector, where firms must comply with many government labor and tax regulations. However, most firms operate in the small-scale "unorganized" sector, where regulations are less stringent and piracy more easily. The unique structure of the Indian textile industry is due to a legacy of tax, labor and other regulatory policies that have always favored small-scale, labor-intensive enterprises while discriminating against large-scale, more capital-intensive operations. The structure is also due to historical regulations to serve the needs of India's predominantly low-income domestic consumers rather than the world market. Policy reforms, which began in the 1980s and continued into the 1990s, have resulted in significant gains in technological efficiency and international competitiveness, particularly in the spinning sector. In 2000/01, the textile and apparel industries accounted for approximately 4 percent of GDP, 14 percent of industrial output, 18 percent of industrial employment and 27 percent of export earnings. However, there remains vast scope for additional reforms that can enhance the efficiency and competitiveness of India's knitting, textile finishing and apparel sectors.

- **Composite Mills:** Relatively large-scale mills that integrate spinning, weaving and, sometimes, fabric finishing are common in other major textile-producing countries. In India, however, these types of mills now account for only 3 percent of production in the textile sector. About 276 composite mills are now operating in India, most of which are public sector owned and many are considered financially "sick".
- **Spinning:** Spinning is the process of converting cotton or man-made fibers into yarn used for weaving and knitting. Largely due to deregulation that began in the mid-1980s, spinning is the most integrated and technologically efficient sector in India's textile industry. However, average plant size remains small compared to other major producers, and technology tends to be out of date. In 2002/03, India's spinning sector consisted of approximately 1,146 small-scale independent firms and 1,599 large-scale independent units.
- **Knitting:** Weaving converts cotton, man-made, or blended yarns into woven or knitted fabrics. India's weaving sector is highly fragmented, small scale and labor intensive. The sector includes about 3.9 million handlooms, 380,000 "powerloom" enterprises operating about 1.7 million looms, and just 137,000 looms in various mixed mills. "Powerlooms" are small firms with an average loom capacity of four to five owned by independent entrepreneurs or weavers. The efficiency of modern shuttle less looms is less than 1 percent of the capacity of the loom.
- **Fabric Finishing:** Fabric finishing (also called processing), which involves dyeing, printing, and other textile preparation prior to the manufacture of clothing, is also dominated by a large number of independent, small-scale enterprises. In all, about 2,300 processors are operating in India, including about 2,100 independent units and 200 units integrated with spinning, weaving or knitting units.
- **Clothes:** Apparel is produced by around 77,000 small-scale units classified as domestic manufacturers, manufacturer exporters and fabricators.

### **Factors that make India Big in Textile Sector**

We have told you that India is a big player in the textile industry, but now we will tell you what are the things that make India more prosperous in this industry than other countries.

#### **Availability of Raw Materials**

The most important thing in India is that it has the best raw materials for the textile industry, today in the 21st century India is the largest producer of cotton and jute. Also, India is only second in the production of silk, polyester and fiber.

#### **Cheap Labor**

You all must be well aware of India's population, when there is no dearth of people, how can there be a dearth of apprentices and artisans in the textile sector. More people in India means cheaper labor means directly cost of production of your clothes goes down which gives us lot of profit all over the world.

#### **High Demand**

This is the specialty of India that due to our population the demand for clothes can never decrease. All types of clothes are always in demand, which gives a lot of boost to this textile industry.

#### **Government Cooperation**

If we talk about the attitude of the government, then the government has allowed 100% FDI in the textile industry and also allowed free trade in many countries. Along with this, the government keeps bringing many schemes so that the textile industry can be made simpler and easier for private companies and they can be attracted.

#### **Economic Value of Textile Industry in India**

In India, the textile and apparel industry are an important and integral part of the manufacturing sector. The industry is a major income and employment generator. It is also a sizeable foreign exchange earner through the export route. Technical textiles are functional fabrics that have applications in a variety of industries including automobiles, civil engineering and construction, agriculture, health care, industrial safety, personal protection, etc.

- The Indian textile and apparel market is currently estimated to be over \$150 billion, of which exports account for over \$40 billion.
- A recent report states that the global textile and apparel trade is set to reach \$1,000 billion by 2025-26 and the Indian textile and apparel market will touch \$250 billion in the same period.
- India accounts for 4% of the US\$840 billion global textile and apparel market, and is ranked fifth.
- It contributes 2.3% to Indian GDP, 7% to industrial production, and 12% to India's export earnings and employs more than 21% of total employment.
- India is also the second largest producer of silk in the world and 95% of the world's hand woven fabrics come from India.
- India is the sixth largest producer of technical textiles with a 6% global share, the largest producer of cotton and jute in the world.
- Technical textiles are functional fabrics used in a variety of industries including automobiles, civil engineering and construction, agriculture, health care, industrial safety, personal protection, etc.
- Of course, the per capita availability and consumption of textiles in India is very low as compared to advanced economies.
- But with increasing disposable income and demographic pressure, the demand is definitely increasing.

#### **Problems of Textile Industry in India**

- **Scarcity of Raw Materials:** The share of raw material in cotton textile production is 35%. India lacks the best quality cotton. India imports long staple cotton from Egypt, Sudan, Pakistan, Turkmenistan and the United States of America.
- **Shortage of Power:** Production is adversely affected due to shortage of energy in the cotton textile industry.

- **Competition in the International Market:** There is heavy competition in the world market from China, South Korea, Japan, Malaysia and Indonesia
- **Sick Mills:** There are more than 100 loss making garment factories in India which need financial help.
- **Strikes and Lockout:** Frequent strikes of workers and lockouts by factory owners also have a bad effect on production.
- **Outdated Technology:** Most of the cotton textile factories in India have old machines, which have low efficiency and the quality of production is also poor. Access to latest technology is a major challenge before the Indian textile industry (especially in small scale industries) and as such it has failed to meet global standards in a highly competitive market. The work of installing new machines in place of old machines of cotton textile factories is going on at a very slow pace.
- **Tax Structure Issues:** The tax structure such as the Goods and Services Tax (GST) makes the clothing industry expensive and uncompetitive in the domestic and international markets.
- **Stable Exports:** Exports from this sector are stable and have remained at the level of \$40 billion for the last six years.
- **Lack of Scale:** The average size of apparel units in India is 100 machines, which is very low compared to Bangladesh, which has an average of at least 500 machines per factory.
- **Lack of Foreign Investment:** Due to the above-mentioned challenges foreign investors are not very enthusiastic about investing in the textile industry which is a significant concern.

The textile industry is mainly concerned with the design, production and distribution of yarn, fabric and clothing. Raw materials can be natural or synthetic, using products of the chemical industry. The textile industry consumes a huge amount of resources such as water, energy and chemicals. Their indiscriminate use threatens stability. Millions of tons of clothing are made, worn and thrown away every year. Globally, the textile industry is known to be a major polluter due to its greenhouse gas (GHG) emissions. Textile and apparel waste is responsible for 17%-20% of all water pollution.

Although the sector has seen a spurt in investment during the last five years, the industry has attracted foreign direct investment (FDI) of only US\$ 3.41 billion from April 2000 to December 2019.

#### Steps Taken by the Government

- **Amended Technology Up-gradation Fund Scheme (ATUFS):** In the year 2015, the government approved the "Amended Technology Up-gradation Fund Scheme (ATUFS)" for the technology up gradation of the textile industry.
- **Scheme for Integrated Textile Parks (SITP):** This scheme provides assistance for creation of world class infrastructure facilities for establishment of textile units.
- **Scheme for Capacity Building in Textile Sector (SAMARTH):** To overcome the shortage of skilled workers, the scheme for Capacity Building in Textile Sector (SAMARTH Scheme) was launched.
- **North East Region Textile Promotion Scheme (NERTPS):** It is a scheme related to promotion of textile industry in NER by providing infrastructure, capacity building and marketing support to all sectors of textile industry.
- **Power-Tex India:** This includes new research and development in powerloom textiles, new markets, branding, subsidies and welfare schemes for workers.
- **Resham Samagra Yojana:** The scheme focuses on improving the quality and productivity of domestic silk so as to reduce the country's dependence on imported silk.
- **Jute Icare:** This pilot project launched in the year 2015 aims to provide certified seeds at subsidized rates to jute cultivators and popularize several newly developed seeding technologies under water limited conditions.
- **National Technical Textiles Mission:** It aims to position the country as a global leader in technical textiles and increase the use of technical textiles in the domestic market. It aims to take the domestic market size from US\$ 40 billion to US\$ 50 billion by the year 2024.

### Suggestions

- India needs to put in place a suitable policy so that the Indian textile industry can contribute in furthering our energy transition commitment.
- To achieve the sustainable goal, it is necessary to adopt good regulatory practices and pay more attention to quality, compliance and investment. As part of this, we need policies to encourage the recycling of discarded clothing. This is important given the country's socio-economic status and income disparities.
- Recently, Bangladesh's readymade garments introduced 'green manufacturing' practices to help conserve energy, water and resources. India can take such initiative to deal with the volatility of the textile industry.
- There is a lot of potential in the textile sector and it should be realized by using innovations, latest technology and facilities.
- India can organize this sector by setting up mega apparel parks and common infrastructure for the textile industry. Attention should be paid to the modernization of obsolete machinery and technology.
- India needs to prepare a comprehensive blueprint for the development of the textile sector. Once it is ready, the country will need to work in mission mode to achieve it.

### Conclusion

The textile and garment industry is one of the largest industries in India. It is also the main source of foreign exchange income in the country. With huge amount of raw material, variety of designs, a huge and skilled workforce and government subsidiaries, this textile industry is in a strong position and can propel India to great heights in days to come. The Government of India is committed to promoting sustainability through sustainable resolution of the project. Today more than 4.5 crore people are working in the textile industry of India, in which there are more than 35 lakh handloom workers. Textile exports from April 2021 to October 2021 stood at \$22.80 billion, including all types of readymade garments. If we talk about the future, then by 2029, this textile industry market will increase to more than 209 billion US dollars, which will simply mean that our textile share in the world will increase from 5% to 15%.

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## A COMPREHENSIVE STUDY ON BLUE-CHIP COMPANIES IN INDIA DURING POST LIBERALIZATION ERA: INDIA'S ECONOMIC GROWTH

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### ABSTRACT

*Blue-chip stocks are high-quality, low-volatility, long-term investments. These stable-earning stocks are well-established. These firms are usually huge, stable, long-standing corporations. These equities are well-established and provide investors long-term benefits owing to their regular profitability. Blue-chip stocks are those of well-known, successful companies. Blue-chip equities possess various attributes that offer advantages to investors over an extended period. Blue chip stocks are favored by a significant number of stock market investors owing to their consistent earnings. This article examines the Indian economy's market performance. Using pre- and post-liberalization stock market data, the article examines the market capitalization association between share performance and market growth. Variables affect market performance and market capitalization positively and quantitatively.*

**KEYWORDS:** *Blue-Chip Stocks, Small Chips, Market Capitalization, Stock, Market.*

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### Introduction

Blue-chip stocks are widely regarded as high-value, superior, less volatile and long-term investment options. These stocks are widely recognized and possess various attributes that offer long-term advantages to investors due to their consistent earnings. Blue-chip stocks refer to stocks of companies that are widely recognized and have a long-standing reputation in the market. Blue-chip equities exhibit various attributes that confer advantages to investors over extended periods. Blue chip stocks are favored by numerous investors in the stock market owing to their consistent earnings [15]. Blue chip equities typically offer a pattern of rising and stable dividend payouts over an extended period, serving as a partial compensation for any transient downturns in the equity's valuation. In times of economic downturn, investors tend to seek refuge in blue chip stocks as a means of safeguarding their investments. This study aims to examine the fundamental analysis of Blue-chip companies in India. The capital market provides a diverse range of investment instruments that are traded, including financial assets such as mutual funds, stocks, bonds, preferred shares, warrants, and rights issues. Investors tend to favour financial assets due to their high liquidity, ease of diversification, and flexibility in modifying the composition of purchased securities [17]. Investors commonly seek stocks as investment instruments. The high frequency of stock trading in the capital market compared to other investment instruments is indicative of this phenomenon [16]. The process of making investment decisions necessitates the careful evaluation of two key parameters, namely risk and return, as per the tenets of contemporary portfolio theory. There exists a positive correlation between return and risk, whereby an increase in risk necessitates a corresponding increase in return as compensation. The selection of individual securities and portfolios comprising securities is subject to the same principles.

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### Blue Chips Company

A blue chip company means an established company that has a large cap, a stable reputation, several years of growth and success, and well-recognized products and services in the business world. A well-capitalized blue chip company is a pioneer that exhibits stable growth each financial year. The whole world knows about these organizations and their goods and services dominate the domestic and international fronts [13]. Thus, when we consider investing in blue chip companies, our investments are considered safe and secure because of the capabilities of these massive businesses to survive any financial turmoil and not be affected by the volatility in the market. Blue chip security is a safe bet and is part of major stock market averages and indexes. For Indian businesses, the market standard is S&P CNX Nifty - a well-diversified 50 stocks index of companies from 14 sectors of the economy. Blue chip stocks are high-priced market stocks that are highly respected in the stock market because of their stable financial position and credibility. These companies pay attractive dividends and are highly sought-after by many. Blue-chip companies can influence the economic strength of a country and you can regularly monitor their performance in financial news [14]. These investments made in Blue Chip companies are considered less risky and less volatile which is why these are extremely popular among investors.

### Criteria of Blue chip Company

Companies with large market capitalization and a strong market reputation are called blue chip companies. The shares they issue are highly valued and have significant features like:

- **Guaranteed Returns:** Blue chip stocks generate returns in the form of dividends every quarter. Since these are profitable organizations, with their financial data out in the open, it is easy for investors to gauge the profit margins of these companies and the dividends they share with their investors [7].
- **Growth Prospect:** Blue chip companies display the highest and most consistent growth potential because of which the blue chip stocks rise slowly but steadily over time. Companies like Coca-Cola, Nestle, McDonald's, are on the Fortune 500 List and can be trusted, as they have displayed growth and profitability for so many years.
- **Creditworthiness:** Blue chip companies have sufficient capital to easily meet their financial obligations. These stocks are found on the National Stock Exchange (NSE), so you can analyse the goodwill and credibility of Blue Chip Companies [8].
- **Investment horizon:** The duration of the investment is generally greater than 7 years so these are best for meeting long-term financial goals.
- **Risk Factor:** Investors can minimize their overall risk exposure by diversifying their investment portfolios and associating with blue chip equities. The risk that is connected with blue chip firms is lower than the risk that is associated with other types of companies.
- **Taxation:** According to Section 80C of India's Income Tax Act, gains made through investing in blue chip securities are considered to be taxable income. Gains on investments held for less than a year are subject to a 15% tax. However, long-term capital gains that are more than one lakh rupees are subject to a tax rate that is ten percent higher. Further, steps should be taken to lessen the weight of risk [9].

### Indian Economy and Blue chip

The payment of dividends to shareholders by blue chip businesses on a consistent basis, regardless of the state of the market, is widely regarded as one of the best opportunities for earning passive income in the Indian economy. Blue chip shares are less prone to price swings than other types of securities; they also demand the least amount of work from researchers, and they don't require researchers to monitor stock prices on a frequent basis [10]. In order to build a diverse portfolio, professionals need to invest in blue chip firms that have solid fundamentals and promising future development. It is essential to bear in mind that blue chip shares and funds are often a component of a buy-and-hold strategy, which requires an extended time horizon for investing purposes. These can be an important component of a well-diversified portfolio, which should also contain lower-risk holdings like Treasuries. Blue-chip companies frequently have solid balance sheets, steady cash flows, tried-and-true business models, and a history of increasing payouts [12]. Investors frequently view blue-chip companies as among the safest stock investments due to their track records and success histories. One must comprehend the fundamental meaning of investment and the factors that control it before we can begin

to explain the various kinds of investment models that are currently available. Investment is simply the trade of cash for a profit-generating commodity [11]. The same earnings are kept and used to buy additional properties. Investment is significant because it promotes growth and development, which are essential for the nation's fiscal health. The government can create job chances for its citizens by investing in the business, agriculture, industry, or supporting sectors. A strong investment situation, however, is one in which the public and private sectors work together to generate investment possibilities.

### **Economic Growth and Sectoral Composition in India**

India embraced socialist economic growth to achieve self-sufficiency and reduce poverty. It followed the Soviet Union's five-year plan, which promoted a mixed economy with public and private sectors. The First Five Year Plan (1951-56) increased GDP through growing domestic savings and agriculture. However, the Second Five Year Plan built public-sector heavy industries. After then, government policy prioritized people and integrated infrastructure building [8]. High growth, national self-reliance, eliminating foreign dominance, indigenous capacity building, expanding small-scale industry, and balanced regional development were policy priorities. However, this did not boost the economy, thus in the late 1980s, an economic liberalization program was initiated. This program resulted in (i) some sectors being relicensed without investment restrictions and (ii) all industries, bar a few, becoming license-free in 1988. In 1991, Manmohan Singh, the finance minister of Shri P. V. Narasimha Rao's ministry, began the liberalization process, which began in the late 1980s. As a result, India's economy underwent changes that boosted manufacturing and services. This expanded GDP and made the service sector the main economic engine. It was obvious that India's economy had fluctuated. The primary, secondary, and tertiary sectors contribute to the growth of the Indian economy, hence the GDP may not be dependent on one sector. Before liberal policies, India's economy was mostly based on agriculture and allied services, making it an agrarian economy.

### **Economic Growth: Post -Liberalization Era (after 1991)**

Dr. Manmohan Singh and Prime Minister Narasimha Rao started the 1991 economic reform. The reforms eliminated the License Raj (investment, industrial, and import licensing) and state monopolies, permitting automatic clearance of foreign direct investment in numerous areas. Since then, liberalization has continued regardless of the ruling party, but no party has taken on powerful lobbies like trade unions and farmers or controversial subjects like labor law reform and agricultural subsidies. By the turn of the century, India had moved toward a free-market economy with reduced state control and financial liberalization (Ahluwalia, 1999). Life expectancy, literacy, and food security have increased. S&P and Moody's boosted India's credit rating to investment level in 2007 after its 1998 nuclear tests. Goldman Sachs estimated in 2003 that India's current-price GDP will surpass France and Italy by 2020, Germany, UK, and Russia by 2025, and Japan by 2035. It was expected to be the third-largest economy by 2035, behind the US and China. Most economists predict India will be a 21st-century economic giant. Indian services lead in IT, BPO, and retail. India has one of the fastest-growing car industry. Economic reforms brought international competition, privatized public sector businesses, opened up public sector sectors, and increased fast-moving consumer goods manufacturing (Ahluwalia, 2002). Post-liberalization, the Indian private sector experienced increased internal and global competition, notably cheaper Chinese imports. Since then, it has cut expenses, revamped management, and relied on cheap labor and modern technologies. However, even smaller firms that used labor-intensive methods have lost employment. Textile industry accounts for 26% of manufacturing output and employs 2nd most people after agriculture. India ranks 15th in services production. It employs 23% of the workforce and grew rapidly from 4.5% in 1951-80 to 7.5% in 1991-2000. From 15% in 1950 to 55% in 2007, it accounts for the most GDP. Information technology, IT-enabled services, and business process outsourcing are among the fastest-growing areas, accounting for one third of service production (Balakrishnan, 2007). The IT sector's growth is attributed to increased specialization, a large pool of low-cost, highly skilled, educated, and fluent English-speaking workers, and increased demand from foreign consumers interested in India's service exports or looking to outsource their operations. India's IT industry's GDP contribution rose from 4.8 % in 2005-06 to 7% in 2008. Seven Indian technology outsourcing businesses made the top 15 in 2009. Chakravarthi Rajagopalachari blamed corruption and inefficiency on 1991 economic reforms that removed red tape, bureaucracy, and the License Raj that had suffocated private industry. However, a 2005 Transparency International (TI) India research indicated that more than half of individuals asked had paid bribes or influenced public officials. The Right to Information Act (2005) and equivalent acts in

Indian states, which require government officials to provide information requested by citizens or face punishment, computerization of services, and various central and state government acts that established vigilance commissions have significantly reduced corruption or opened avenues to redress grievances. India ranks 87th in Transparency International's 2010 report and achieved substantial corruption reduction setbacks (Balakrishnan, 2008). "Vast armies of paper-shuffling peons" work for the Indian central government, according to a 2008 Economist report. Local government is worse. Convicted felons can have a state assembly majority. One survey showed 25% of public sector teachers and 40% of public sector medical employees absent. India has the world's worst absenteeism. India has increased elementary school attendance and literacy to two thirds of the population (Chand, 2007). The eighty-sixth Amendment of 2002 proclaimed primary education a basic right, and legislation has been passed to provide free education to all children.

Fiscal Year (FY)	Year	Growth Rate (GDP) (%)
FY 99	1998-99	6.6
FY'00	1999-00	6.4
FY 01	2000-01	6.0
FY02	2001-02	5.6
FY03	2002-03	4.4
FY04	2003-04	8.2
FY05	2004-05	6.9
FY06	2005-06	8.1
FY07	2006-07	9.2
FY08	2007-08	8.7
FY09	2008-09	6.7
FY10	2009-10	7.2
FY11	2010-11	8.6
FY12	2011-12	6.9
FY13	2012-13	7.6
FY14	2013-14	6.7
FY15	2014-15	5.9
FY16	2015-16	7.9
FY17	2016-17	7.1
FY18	2017-18	6.5
FY19	2018-19	7.5

Source: Economic Surveys, from 1999 to 2018

Kaustubh Dhargalkar, professor of business design and head of the innovation lab at the Center For Innovation and Memetics at the Mumbai-based Welingkar Institute of Management Research and Development, and his research assistant Rudra Desai investigated how liberalization has shaped successful Indian entrepreneurs. Dhargalkar studied BSE Group A businesses from 1995 to 2011. Dhargalkar picked this group for the study because it represented elite, high-performing, and sought-after enterprises. Policy choices normally take three to four years to affect company performance at the ground level.

### Conclusion

Growth improves people's lives. Growth must benefit everyone. Inclusive growth. Growth is inclusive when it allows all members to contribute equally regardless of their circumstances. Recent prosperity in India has not reduced economic disparity, which is exacerbated by centuries of societal prejudice. Inclusive growth must address inequality's causes. It must address economic inequality causes. Blue chip companies finance the Indian business sector as part of economic liberalization. Blue chip companies' main roles include mobilizing investor funds immediately, providing liquidity, and

monitoring and punishing firm management. Indian history demonstrates that such an institutional framework will most likely evolve slowly and that without one, transition costs might be considerable. Thus, assumptions based on aggregate data may lead to erroneous policy recommendations without a better understanding of emerging nation blue chip companies.

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## SECTORAL AND SUB-SECTORAL DISTRIBUTION OF NPA AMONG PUBLIC AND PRIVATE SECTOR BANKS

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### ABSTRACT

*This comprehensive study explores the trends and dynamics of non-performing assets (NPAs) in the priority and non-priority sectors of both public and private sector banks from 2000 to 2022. The research not only analyzes the overall NPA figures but also delves into the sub-sector analysis within the priority and non-priority sectors. By examining lending patterns and associated NPAs, the study aims to provide insights into the reasons behind the varying NPA figures among different sectors. By analyzing data over the extensive time frame, the findings reveal that the current NPA problem is primarily attributed to the non-priority sector as compared to priority sector. When considering bank groups, it is evident that NPA is more pronounced in priority sector as compared to non-priority in public sector banks while the opposite holds true for private sector banks. Furthermore, the data reveals a minimal disparity between the priority and non-priority sector NPAs in public banks, whereas the data is highly skewed towards non-priority sector in case of private sector banks. Within the priority sectors, the proportion of NPAs highlights the significant share contributed by MSME (Micro, Small, and Medium Enterprises) sectors, followed by agriculture and other priority sectors in both public and private sector banks. On the other hand, the sub-sector analysis of the non-priority sector reveals variations in NPAs, with a relatively higher incidence of loan defaults observed in the industrial sector compared to agriculture, services, and retail sectors. Further disaggregated analysis of industries identifies basic metal, construction, and gems and jewellery as major contributors to stress within the industrial sector due to higher credit disbursed in these sectors.*

**KEYWORDS:** Non- Performing Asset (NPA), Priority Sector, Non-Priority Sector, Public Banks, Private Banks.

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### Introduction

In an emerging economy like India, the banking sector serves as a cornerstone in extending credit thus, fostering economic growth and development (Bajaj, Sanati, and Lodha,2020). Therefore, ensuring the robustness of the banking system becomes imperative for maintaining overall financial stability. However, the banking system is grappling with the Non-Performing Asset (NPA) posing a significant hurdle to its stability and efficiency. The extent of NPAs is contingent upon the lending practices and types of loans disbursed by the banks. Recognizing this, the Reserve Bank of India (RBI) has classified bank lending into different sectors, namely priority and non-priority lending. Priority sector lending (PSL) refers to the practice of providing credit and financial services to certain sectors of the economy that are considered important for the overall development and welfare of the country. To achieve, the socioeconomic objectives, PSL ensured that credit is made available to sectors that typically face difficulties in accessing finance from traditional sources. PSL includes sectors **like agriculture, micro, small and medium enterprises (MSME), export credit, education, housing, social**

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**infrastructure, renewable energy, and others.** Non-priority sector lending in India encompasses sectors that fall outside the scope of these priority sectors, **such as agriculture, Industry especially large scale, services sector, and retail sector** that do not qualify for priority sector lending under the RBI guidelines. The RBI has issued a mandate stating a minimum of 40% of average net bank credit (ANBC) or the credit equivalent of off-balance sheet exposure (CEOBE), whichever is higher, must be extended to these sectors. Within the priority sector lending framework, specific sub-sectors like **Agriculture, Micro-enterprise, and Weaker sections will have individual sub-targets of 18%, 7.5%, and 12% respectively**. Recently, RBI revamped the list of priority sectors mentioned in the circular dated August, 2020 and added bank finance to start-ups (up to Rs 50 crore), loans provided to farmers for the installation of solar power plants and solarization of grid-connected agriculture pumps, as well as loans for the establishment of compressed biogas (CBG) plant as new categories eligible for finance under PSL. (RBI,2020).

Numerous countries developed and developing, heavily focus on directed credit lending to provide credit to the hitherto marginalized segments of society and ensure balanced economic growth (Kohli, 1997). Priority sector lending (PSL) is a subset of direct credit lending that was coined in 1972 by Dr. K.S. Krishnaswamy in the dictionary of the Indian Banking sector. Since then, the government has promoted lending loans to sectors like agriculture, SMEs, and other weaker sections, termed as "priority sectors", as they generate jobs and contribute to economic growth. To boost lending programs, the Indian government nationalized banks in 1969 with the assistance of the RBI, obligating the public sector banks to allocate a specific percentage of their bank advances to these sectors. Earlier, no target was fixed by the RBI. Subsequently, in 1979, the target was fixed at 33% for commercial banks and further revised to 40% in 1985. Not only commercial banks but also cooperative banks will eventually be required to adhere to the RBI's lending criteria for these sectors. Since then, various modifications to the PSL categories and subcategories have been made on a recurring basis to reflect the economy's changing requirements.

Thus, the purpose of this study was to conduct a sectoral analysis of NPA based on the outlined roadmap: The first section began with an introduction. Section two delineates a brief overview of the existing literature as well as the study's gaps, followed by research methodology in the third section. Section four is conferred with an analytical framework followed by empirical findings in the fifth session. Eventually, the sixth section brings the end to the study with concluding remarks.

### **Literature Review**

Non-priority Sector has long been an important subject of research, and authors have attempted to unravel the various facets of NPA and their sectoral analysis via their research. Therefore, a comprehensive analysis and systematic scanning of already existing studies have been done in order to develop new dimensions in sector-wise NPA of the banks.

Gaur and Mohopatra (2020) conducted a study to explore the relationship between economic growth and lending to the priority sector, considering the significant role played by Priority Sector Lending (PSL) in addressing socio-economic inequalities, promoting financial inclusion, and reducing income disparities. However, it has been observed that banks sometimes misuse the funds allocated for priority sector lending. As a consequence of expanding the scope of the priority sector, funds are occasionally diverted to other sectors while still meeting the PSL targets (Shajahan, 1998). To ensure that areas of national importance are included in the priority sector, the Reserve Bank of India (RBI) regularly revises the list of priority sectors. Dasgupta (2002) highlighted the neglect of certain sectors such as agriculture, small-scale industries, and the lower-income group due to risk factors and urban bias, and thus proposed a new approach to incorporate these sectors into PSL. Despite the mandatory requirement for banks to extend credit to the priority sector, studies conducted by Uppal (2010); Veena and Prasad (2020); Shabbir and Mujjo (2014) highlight that public sector banks have surpassed their private counterparts in meeting the targets of Priority Sector Lending (PSL). Susena et al. (2021) discussed that PSL has a positive and significant implication on the banks' financial health. Thus, NPA is a by-product of PSL, and lending to the priority sector has harmed the profitability of Indian banks (Desai, 2021).

Despite the perceived attractiveness of the non-priority sector for banks, lending to the priority sector adds to the burden of bad loans, as highlighted in the Trend and Progress Report and the Narasimham committee's recommendations by the RBI. However, it is ironic that Shajahan (1999) concluded that the high level of total NPA in banks was not primarily caused by the priority sector, but rather a substantial portion was attributed to the non-priority sector. Similar results were observed by

Gaur and Mohapatra (2019). On the other hand, Rajeev and Mahesh (2010) conducted a study on the trend of non-performing assets (NPA) across sectors and found that NPAs in the priority sector were indeed higher than those in the non-priority sector between 2004 and 2009. Analyzing NPA on a bank group-wise basis, Veerkumar (2012) and Lokare (2014) pointed out that NPA was higher in public sector banks compared to private and foreign banks during the study period. Similar studies conducted by Dutta, 2019; Shabbir and Mujoo (2014); Goyal, Agrawal, and Agrawal (2016) also revealed significantly higher NPA in the priority sector of public sector banks compared to private sector banks.

### Research Gap

Due to the fact that NPAs are a major concern in the banking sector, numerous studies on priority sector lending have been conducted, with a particular emphasis on the relationship between NPAs and the priority sector. Additionally, numerous studies examined the target attainment or NPA trends in different sectors. However, till date, there has been a lack of comprehensive analysis that dissects NPA into different sub-sectors. In addition, the risk of loan defaults varies across different sectors by various ownership groups. Therefore, it is crucial to identify the specific sector from which NPA originates in order to facilitate targeted policy formulation.

### Research Methodology

This paper primarily concentrates on conducting a sector-wise analysis (specifically the priority and non-priority sectors) of non-performing assets (NPAs) in public and private sector banks. Additionally, a sub-sector analysis of NPAs within these sectors is conducted to identify the sources of NPAs within each sector. The study is descriptive and analytical in nature and is based on secondary data over a period spanning from 2001 to 2022. The data has been culled from the reports of RBI namely "Trend and Progress of Banking in India" and "Financial Stability Report". Moreover, RBI circulars were deeply analyzed to include the updated information in the context of PSL norms. The sample size comprises data from public and private banks, while foreign banks, which have a distinct PSL target of 32%, are analysed separately and are excluded from the overall PSL analysis. This study employed percentage calculations, growth trend analysis, and charts, facilitating a comprehensive and lucid representation of the data.

### Results and Discussion

Comparison of the sector-wise distribution of NPA among private and public sector banks within the Commercial banks.

Table 1 and Figure 1 depicts a comparative analysis of delinquent assets in the priority and non-priority sectors, along with a comparison between public and private sector banks.

During the initial period of study, NPA incurred by public sector banks in the non-priority sector appeared to be colossal as compared to the priority sector. However, during the subsequent period of 2006-12, the trend reversed, and there was a discernible surge in priority sector NPA, averaging around 55 percent, while NPA in the non-priority sector stood at 45 percent. The main contributing factors to the increase in non-performing assets (NPAs) in the priority sector during the period of 2006-2012 were the mandatory lending requirement of 40 percent to priority sectors, the poor recovery of agricultural advances (which constitutes a significant portion of the priority sector advances), and the loan waiver scheme introduced by the RBI in 2008. Additionally, the recovery in the MSME sector was not satisfactory. During the post-crisis period, particularly after 2012, non-priority sector NPAs witnessed a notable increase, with their share rising from 50.15 percent in 2012-13 to 55.31 percent in 2021-22. In contrast, NPAs in the priority sector declined, accounting for 44.69 percent in 2021-22 compared to 47.57 percent in 2012-13. **The sectoral breakdown among public sector banks revealed that the NPA ratio is more pronounced in non-priority sectors relative to priority sectors in India barring 2006-12.**

Within private banks, it has been consistently observed that the non-priority sector contributes a higher proportion of non-performing assets (NPAs) compared to the priority sector. Data analysis indicates that the share of NPAs in the priority sector decreased from 28.6 percent in 2001-02 to 19.7 percent in 2019-20. Conversely, the share of NPAs in the non-priority sector increased from 69.45 percent in 2001-02 to 80.3 percent in 2020. However, in recent years, the share of NPAs in the priority sector rose once again to 28.71 percent, while the share of NPAs in the non-priority sector stood at 71.29 percent. Despite this increase in the priority sector's share, **non-priority sector NPAs still remain a significant source of crisis for private banks.**

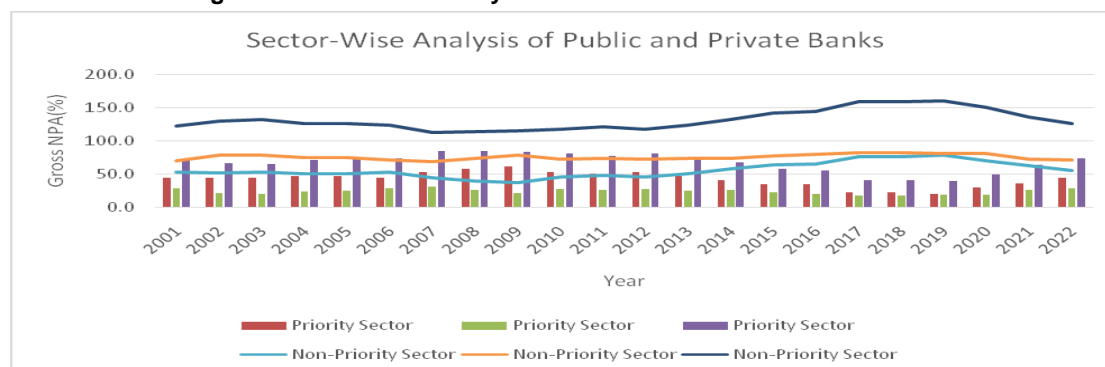
**Table 1: Sector-wise Gross NPA of Commercial Banks (Public and Private Banks) (%)**

Year	Priority Sector			Non-Priority Sector		
	Public Banks	Private Banks	Total	Public Banks	Private Banks	Total
2001	44.5	28.6	73.1	53.5	69.5	123.0
2002	45.4	21.8	67.3	51.4	77.9	129.3
2003	44.5	20.6	65.1	53.3	78.6	131.9
2004	47.2	24.0	71.2	50.7	75.3	126.0
2005	47.5	24.9	72.4	51.2	74.7	125.9
2006	45.2	29.2	74.4	53.5	70.8	124.3
2007	53.8	31.2	85.0	44.2	68.8	112.9
2008	58.0	26.3	84.3	40.2	73.7	113.8
2009	61.5	21.6	83.1	37.1	78.0	115.1
2010	53.8	27.6	81.4	45.6	72.4	118.0
2011	50.9	26.8	77.7	48.6	73.2	121.8
2012	53.8	27.9	81.7	45.9	72.1	118.0
2013	47.6	26.0	73.6	50.2	74.0	124.2
2014	40.9	26.6	67.5	58.4	73.4	131.8
2015	35.2	22.8	58.0	64.8	77.2	142.0
2016	34.7	21.0	55.7	65.2	79.0	144.2
2017	23.3	18.0	41.3	76.7	82.0	158.7
2018	23.5	18.0	41.5	76.5	82.0	158.5
2019	20.9	19.0	39.9	79.1	81.0	160.1
2020	29.9	19.7	49.6	70.1	80.3	150.4
2021	36.7	27.0	63.7	63.3	73.0	136.3
2022	44.7	28.7	73.4	55.3	71.3	126.6
<b>Average</b>	<b>47.94</b>	<b>24.43</b>	<b>72.4</b>	<b>52.06</b>	<b>75.4</b>	<b>127.4</b>

Source: Compiled from the RBI report "Trend and Progress of Banking in India" various issues.

Note: Percentage values shows the Gross NPA of banks as a percentage of total Gross NPA

The bank group-wise analysis highlights that the growth of priority sector NPA for public sector banks surpasses that of private sector banks significantly indicating comparatively better loan management in the latter. The combination of economic downturn, increased interest rates, low credit demand, and corporate deleveraging, partially reflects elevated levels of non-priority sector NPAs. Another reason could be the loan disbursement which is higher in case of public sector banks despite the same sectoral targets. Thus, public sector lends more to the priority sector and thus, the observed disparity suggests that private sector banks maintain lower exposure to stressed sectors while focusing more on lending to the less risky non-priority sector (ie. Retail sector), thereby contributing to their relatively better loan performance. **Furthermore, the data reveals a minimal disparity between the priority and non-priority sector NPAs in public banks, whereas the data is highly skewed towards non-priority sector in case of private sector banks.**

**Figure 1: Sector-wise Analysis of Public and Private Sector Banks**

Source: Compiled from the RBI report "Trend and Progress of Banking in India" various issues.



### Sectoral Analysis and Growth of NPA in the major Priority sectors

The sectoral analysis indicates that NPAs in both public and private banks can be attributed to both the priority and non-priority sectors. In order to delve deeper and gain more insights, a disaggregated analysis was performed which include a comparison of the lending to three major sectors agriculture, MSME, and other sectors in order to determine which sector comprises the majority of the NPA, so that policy can be formulated accordingly.

**Table 2: Sub-sector-wise Gross NPA of priority sector among Public and Private Sector Banks (in percentage)**

Year	Public Sector Banks				Private Sector Banks			
	Priority Sector	Agriculture	MSME	Others	Priority Sector	Agriculture	MSME	Others
2001	45.4	13.9	19.4	12.1	21.8	5.0	15.6	8.0
2002	44.5	13.8	18.7	11.9	20.6	3.8	12.7	5.3
2003	47.2	14.6	19.2	13.4	24.0	4.5	10.6	5.5
2004	47.5	4.4	17.6	15.5	24.9	4.4	12.2	7.4
2005	45.2	15.2	16.4	17.4	29.2	5.3	11.0	8.6
2006	53.8	15.0	16.7	22.4	31.2	6.6	10.3	12.3
2007	58.0	16.9	15.1	27.5	26.3	9.3	7.0	14.9
2008	61.5	20.8	14.6	28.8	21.6	11.3	5.0	10.0
2009	53.8	13.0	15.9	26.4	27.6	8.5	3.9	9.1
2010	50.9	14.5	20.1	19.2	26.8	11.6	6.6	9.4
2011	53.8	20.4	20.2	17.5	27.9	12.1	7.2	7.5
2012	47.6	20.2	15.5	14.3	26.0	11.8	9.4	6.7
2013	40.9	18.0	18.2	6.7	26.6	10.9	9.9	5.3
2014	35.2	N.A.	N.A.	N.A.	22.8	N.A.	N.A.	N.A.
2015	34.7	N.A.	N.A.	N.A.	21.0	N.A.	N.A.	N.A.
2016	23.3	8.9	13.1	3.5	18.0	8.2	9.6	3.1
2017	23.5	8.5	11.8	3.7	18.0	7.2	8.7	2.2
2018	20.9	8.9	9.7	3.6	19.0	7.6	7.8	2.6
2019	29.9	13.1	12.2	4.6	19.7	8.1	8.2	2.7
2020	36.7	17.3	14.1	5.3	27.0	7.9	8.8	3.1
2021	44.7	19.9	17.6	7.1	28.7	10.1	12.6	4.4
2022	47.9	21.8	19.0	7.2	28.6	12.3	10.5	5.9
<b>Average</b>	<b>43.0</b>	<b>15.0</b>	<b>16.3</b>	<b>13.4</b>	<b>24.4</b>	<b>8.3</b>	<b>9.4</b>	<b>6.7</b>

Source: RBI, Trend and Progress Report, assorted issues.

NA: Not Available

Note: The data above in Percentage shows the Gross NPA as % of Total NPA.

Table 2 and Figure 2 illustrates the sub-sector analysis of Non-Performing Assets (NPA) in the Priority sector for both public and private banks. A comparison of the data reveals that public sector banks hold a significant majority share in Gross NPA at 43 percent, whereas private sector banks account for half of that at 21.5 percent.

The sub-sector analysis highlights that, within both public and private sector banks, the MSME (Micro, Small, and Medium Enterprises) sector has the highest share of NPA, followed by the agriculture sector and other priority sectors. Interestingly, despite having the same targets, public sector banks exhibit a much larger share of NPA in the MSME sector, with 16.3 percent compared to the private banks' 9.4 percent. Similar patterns are observed in the agriculture and other priority sectors, where public sector banks hold shares of 15.0 percent and 13.4 percent, respectively, while private banks contribute 8.3 percent and 6.7 percent, respectively.

**Figure 2: Sub-Sectoral Analysis of Priority Sector within Public and Private Banks**



Source: Compiled by the author on the basis of the average data in Table 2.

### Non-Priority Sector NPA of Commercial Banks

The sub-sectoral analysis of non-priority sector Non-Performing Assets (NPA) is depicted in Table 3 and Figure 3. Due to the unavailability of bank-group-specific data, the focus of the analysis was on non-priority NPA within commercial banks. Moreover, sub-sector-wise data was available from 2016 onwards that is taken into consideration for analysis.

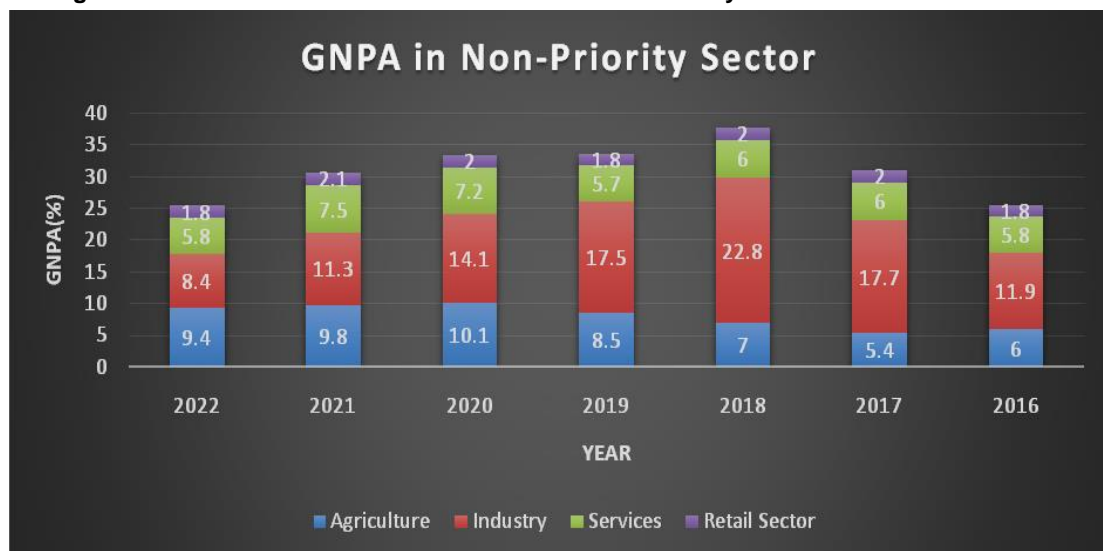
**Table 3: Sub Sector-wise (GNPA as a % of total advances) in the Non-priority Sector of Commercial banks**

Year	Agriculture	Industry	Services	Retail Sector
2016	6	11.9	5.8	1.8
2017	5.4	17.7	6	2
2018	7	22.8	6	2
2019	8.5	17.5	5.7	1.8
2020	10.1	14.1	7.2	2
2021	9.8	11.3	7.5	2.1
2022	9.4	8.4	5.8	1.8
<b>Average</b>	<b>8</b>	<b>14.8</b>	<b>6.3</b>	<b>1.9</b>

Source: RBI Financial Stability Report, Various issues

An in-depth analysis of sector-wise non-performing assets (NPAs) within the non-priority sector, reveals that the industrial sector exhibits a higher proportion of NPAs compared to its counterparts in the banking sector. Between 2016 and 2018, the industrial sector experienced a notable upward trend in non-performing assets (NPAs), with the NPA ratio rising from 11.9 percent to 22.8 percent. However, there was a subsequent improvement in the ratio, reaching a low of 8.4 percent by 2022. There has been a notable shift in recent years in the composition of non-priority sector NPAs. The agriculture sector has emerged as a significant contributor, experiencing a substantial increase in NPAs until 2020, followed by a subsequent decline. By 2022, the overall NPAs in the agriculture sector reached 9.4 percent. The services sector also displayed a considerable number of NPAs, although their gross non-performing asset (GNPA) ratios remained relatively stable between 2016 and 2022, standing at 5.8 percent in 2022. On the contrary, the Retail sector exhibits undulating trends eventually reaching an NPA ratio of 1.8 percent in 2022.

**Figure 3: Sub Sector-wise share of GNPA in the Non-Priority Sector of commercial Banks**



As discussed previously, on average, the industrial sector accounts for a significant portion of NPA within Non-priority sector. Looking at the data in table 4, we can observe the trends and changes in GNPA ratios and credit share for different industries over the years. This information helps in assessing the potential risk of NPA within various industries.

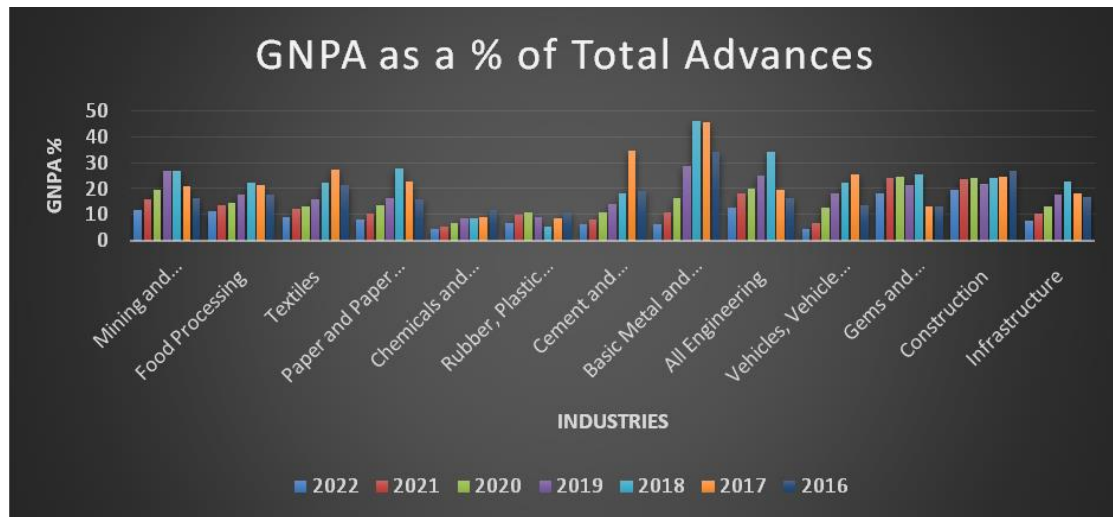
**Table 4: Credit share and GNPA in Major Industries**

Industries	GNPA (%)							Credit to Industry (%Share)								
	2022	2021	2020	2019	2018	2017	2016	Average	2022	2021	2020	2019	2018	2017	2016	Average
Mining and Quarrying (incl. Coal)	12	16.1	19.8	26.7	26.8	21.1	16.3	19.8	1.5	1.4	1.5	1.4	1.2	1.2	1.3	1.4
Food Processing	11.2	13.5	14.5	17.6	22.3	21.4	17.7	16.9	6.4	6.1	5.4	5.3	5.7	5.6	5	5.6
Textiles	9	12.3	13.1	16.1	22.3	27.5	21.3	17.4	6.6	6.6	6.3	6.5	7.3	7.3	6.9	6.8
Paper and Paper Products	8.1	10.3	13.6	16.39	28	22.8	16	16.5	1.2	1.2	1.1	1	1.2	1.2	1.2	1.2
Chemicals and Chemical Products	4.3	5.6	6.9	8.5	8.8	8.9	11.8	7.8	6	6.5	6.9	6.9	6.2	6.5	5.3	6.3
Rubber, Plastic and their Products	6.9	9.8	10.7	9.2	5.2	8.6	10.8	8.7	2.2	1.8	1.8	1.6	1.5	1.4	1.2	1.6
Cement and Cement Products	6.5	8.2	11.1	14.2	18.1	34.6	19	16.0	1.3	1.6	1.9	1.8	2	1.9	1.7	1.7
Basic Metal and Metal Product	6.5	10.9	16.2	28.5	46.3	45.8	34.4	26.9	8.4	9.9	11.3	11.5	14.4	14.7	13.6	12.0
All Engineering	12.8	18	20	25	34.4	19.4	16.5	20.9	5.3	5	5.7	5.7	5.8	5.5	5.3	5.5
Vehicles, Vehicle Parts and Transport Equipment	4.6	7	12.9	18.4	22.5	25.6	13.8	15.0	3.1	3.1	3.2	3	2.9	3	2.4	3.0
Gems and Jewellery	18.4	24	24.8	21.5	25.4	13	13.2	20.0	2.6	2.5	2.4	2.7	2.9	2.7	2.5	2.6
Construction	19.4	23.5	24.3	21.8	24	24.5	27	23.5	3.7	3.7	3.9	3.7	3.8	3.5	2.9	3.6
Infrastructure	7.7	10.5	13.1	17.8	22.6	18.3	16.7	15.2	38	37.2	36.2	36.4	34.1	34	32.8	35.5

Source: RBI: Financial Stability Report, various issues

Note: GNPA indicates the percentage of NPA to total advances within the particular sector, Credit to industry shows the total credit allocated to each industry.

Sub-industrial analysis shows that basic metal (26.9 percent), construction (23.5 percent) and gems and jewellery (20.0 percent) are the major contributors in the stress within the industrial sector. Notably, the credit disbursed was more pronounced in the case of infrastructure (35.5 percent), followed by basic metals (12.0) and textile (6.8) reflecting elevated levels of sectoral NPA. The major reason for NPA is that construction and power sectors were plagued by land acquisition issues, delays in obtaining various clearances, lengthy gestation periods, and cost overruns. Similarly, the gems and jewellery sector witnessed an increase in NPAs due to declining exports during 2019-20 and the exposure of fraudulent activities.

**Figure 4: Gross NPA within Major Industries of commercial Banks**

### Findings and Conclusion

The objective of the study was to analyze the NPA trends in the priority and non-priority sectors, leading to the conclusion that the non-priority sector plays a major role in the overall increase of NPAs in the banking sector. The analysis of public sector banks' NPA composition reveals that the non-priority sector loans are primarily responsible for the current NPA crisis, whereas the situation was reversed during the period from 2006 to 2012. Similarly, private sector banks have a higher share of NPAs in the non-priority sector throughout the study period. This can be attributed to the credit approach of public banks, which focused on lending to high-risk and sensitive areas, while private banks refrained from lending to these sectors and adopted a more risk-averse policy by limiting credit to infrastructure projects and medium/large industries. Furthermore, the data reveals a minimal disparity between the priority and non-priority sector NPAs in public banks, whereas the data is highly skewed towards non-priority sector in case of private sector banks. Within the priority sectors, the proportion of NPAs highlights the significant share contributed by MSME (Micro, Small, and Medium Enterprises) sectors, followed by agriculture and other priority sectors in both public and private sector banks. On the other hand, the sub-sector analysis of the non-priority sector reveals variations in NPAs, with a relatively higher incidence of loan defaults observed in the industrial sector compared to agriculture, services, and retail sectors. Further disaggregated analysis of industries identifies basic metal, construction, and gems and jewellery as major contributors to stress within the industrial sector due to higher credit disbursed in these sectors.

To address the issue of non-performing assets (NPAs) in the non-priority sector, numerous measures were implemented by regulatory authorities. However, to address NPAs in the non-priority sector requires a comprehensive approach that focuses on strengthening credit assessments, implementing robust risk management practices, and adopting sector-specific lending policies. By doing so, banks can enhance their ability to manage and reduce NPAs, thereby contributing to a healthier financial system.

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## DIRECT MUTUAL FUNDS VS. REGULAR MUTUAL FUNDS: A CONCEPTUAL ANALYSIS

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### ABSTRACT

*The return on direct mutual fund is more than the return on regular mutual fund for its less expenses ratio. Investment made in direct mutual funds helps to achieve speedily the long term goals of the investors. Investors enjoy the benefits to invest through mutual funds in equity shares, bonds, money market instruments and government securities. The annualized returns in percentage and lump sum returns on investment of ten years are analyzed in this study to understand the additional return of direct mutual fund schemes during the ten years investment period.*

**KEYWORDS:** Regular Mutual Fund, Direct Mutual Fund, Annualized Return, Regular Plan Growth, Direct Plan Growth.

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### Introduction

Investment goals are different for different persons. These are the purchase of the house, education of children, marriage of education etc. These goals may be achieved through the investment in mutual funds. Through mutual funds investment, investors enjoy to invest in equity shares, bonds, money market instruments and government securities. This investment is made relatively in low cost and low risk with the decision of expert financial advisors. This is the best option of retail investors to invest their money in capital markets. According to the SEBI guidelines mutual funds are categorized as Equity Schemes, Debt Scheme, Hybrid Schemes, and Solution Oriented Schemes – for retirement purpose and children's education and Other Schemes – Index Funds & ETFs and Fund of Funds. In this paper, five different equity schemes are analyzed. As per investment pattern of investor in mutual fund, investment is made mainly in two ways: direct mutual fund investment and regular mutual fund investment. Direct mutual fund investment is made by investors himself without help of any distributor or agent and regular mutual fund investment is made with the help of distributor or agent and professional guidance. Regular plan has higher expense ratio than the direct plan. Maximum same mutual fund schemes have direct mutual fund and regular mutual fund with common portfolio and same fund manager. Lower expense ratio translates more return on direct plan of mutual funds. In this paper, return on mutual funds on same scheme under direct plan and regular plan are analyzed to understand the additional return on direct mutual fund scheme using yearly return for the period of ten years.

### Objectives of the Study

The present paper has the following objectives on the basis of the topic studied:

- To find the return of select Direct Mutual Funds and Regular Mutual Funds
- To compare the return of select Direct Mutual Funds and Regular Mutual Funds
- To analyze the Initial Investment (IV) of Rs. 10000 during ten years for five mutual fund schemes -Regular Plan Growth(RPG) and Direct Plan-Growth (DPG)

### Methodology

In this division, five mutual funds which have both regular and direct plan from equity schemes are selected randomly from different fund houses. These five mutual funds with regular and direct plans are analyzed on the basis of ten years' return considering the commission & expenses etc of professional guidance and fund houses. The following information regarding this paper is considered to analyze the three objectives of this study.

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The paper is exploratory in nature and the secondary data is used in this study. The data is collected from books, journal articles, moneycontrol.com and AMFI India websites.	
Five equity mutual fund schemes- Regular & Direct Plan – Growth	Mirae Asset Large Cap Fund – Regular& Direct Plan – Growth (MALCF) Canara Robeco Equity Hybrid Fund – Regular & Direct Plan-Growth (CREHF) ICICI Prudential Focused Equity Fund –Regular& Direct Plan-Growth (IPFEF) Nippon India Large Cap Fund – Regular & Direct Plan - Growth (NILCF) SBI Large & Midcap Fund - Regular & Direct Plan – Growth (SLMF)
Period of the Study	Ten Years 1 <sup>st</sup> Year 2 <sup>nd</sup> Year 3 <sup>rd</sup> year 5 <sup>th</sup> Year 10 <sup>th</sup> Year
<b>Objectives</b>	<b>Statistical Tools</b>
To analyze the annualized return of five mutual funds schemes for ten years	Percentage (%)

### Analysis and Findings

- In this section, ten years of data are analyzed to materialize the objectives of this study
  - **To find the return of select Direct Mutual Funds and Regular Mutual Funds**
- Here, the return of the five mutual fund schemes both direct and regular are shown in the following Table-1.

**Table 1: Return in Regular & Direct Mutual Fund**

Year/ Name of Fund	MALCF -RPG (%)	MALCF -DPG (%)	CREHF -RPG (%)	CREHF -DPG (%)	IPFEF -RPG (%)	IPFEF -DPG (%)	NILCF -RPG (%)	NILCF -DPG (%)	SLMF -RPG (%)	SLMF -DPG (%)
1 Year	12.31	13.49	12.26	13.60	17.04	18.60	22.48	23.51	18.49	19.44
2 Year	10.29	11.45	9.15	10.49	13.60	15.07	17.97	18.96	16.14	17.07
3 Year	24.68	26.01	19.08	20.52	28.42	30.06	32.16	33.27	32.46	33.49
5 year	11.11	12.28	11.22	12.55	13.14	14.46	12.15	13.13	13.49	14.34
10 year	15.64	16.74	13.67	14.80	13.38	14.63	14.94	15.95	16.51	17.22
Average	14.81	15.99	13.08	14.39	17.12	18.56	19.94	20.96	19.42	20.31

Source: moneycontrol.com/mutual-funds/nav

### Findings

In the above Table-1, the annual return and average return on the mutual fund schemes-regular plan is less than the return on the mutual fund schemes-direct plan. It happens for the fewer expenses on return on mutual fund schemes-direct plan than the return on mutual fund schemes-regular plan.

### To Compare the Return of select Direct Mutual Funds and Regular Mutual Funds

In this part, it is compared the excess return of Direct Mutual Funds over Regular Mutual Funds in the following Table-2.

**Table 2: Difference in the Return**

Year/Name of Mutual Fund	MALCF -RPG minus MALCF -DPG (%)	CREHF-RPG minus CREHF -DPG (%)	IPFEF-RPG minus IPFEF-DPG (%)	NILCF-RPG minus NILCF_DPG (%)	SLMF-RPG minus SLMF-DPG (%)
1 Year	1.18	1.34	1.56	1.03	0.95
2 Year	1.16	1.34	1.47	0.99	0.93
3 Year	1.33	1.44	1.64	1.11	1.03
5 year	1.17	1.33	1.32	0.98	0.85
10 year	1.10	1.13	1.25	1.01	0.71

Source: Computed by Authoron the Basis of Table-1

### Findings

The Table-II shows the positive percentage return between direct mutual fund scheme and regular mutual fund scheme. It occurs for lesser expenses on direct mutual fund scheme than the expenses of regular mutual fund scheme.



**To analyze the initial investment of Rs. 10000 during ten years for five mutual fund schemes -Regular Plan Growth (RPG) and Direct Plan-Growth (DPG)**

Under this section, the growth of initial investment of rupees ten thousand only during the ten years period is evaluated and shown in the following Table 3 & 4.

**Table 3: Initial Investment**

IV (Rs)	MALCF -RPG (Rs)	MALCF -DPG (Rs)	CREHF-RPG (Rs)	CREHF -DPG (Rs)	IPFEF-RPG (Rs)	IPFEF-DPG (Rs)	NILCF-RPG (Rs)	NILCF -DPG (Rs)	SLMF-RPG (Rs)	SLMF-DPG (Rs)
10000	42825	47087	36057	39792	35141	39203	40276	43985	46160	49047

Source: moneycontrol.com/mutual-funds/nav

**Table 4: Difference in Lump Sum Investment**

IV (Rs)	MALCF -RPG minus MALCF -DPG (Rs)	CREHF-RPG minus CREHF -DPG (Rs)	IPFEF-RPG minus IPFEF-DPG (Rs)	NILCF-RPG minus NILCF-DPG (Rs)	SLMF-RPG minus SLMF-DPG (Rs)
10000	4262	3735	4062	3709	2887

Source: Computed by Author on the Basis of Table 3.

### Findings

The initial investment of Rs. 10000 (rupees ten thousand only) in Table-III for ten years grows more in every direct mutual fund scheme than the each regular mutual fund scheme. It is for the less expense ratio and more return on the direct mutual fund scheme. Difference between direct and regular mutual fund schemes for lump sum Investment shows the positive amount in Table-IV. This is occurred for more expenses and also for less return on regular mutual fund scheme.

### Conclusion

This paper finds that investments made directly in mutual fund schemes are more beneficial in the annual return on the investment in mutual fund. It is helpful to invest directly in different mutual fund schemes by the investors to get more return on their investment amount in the mutual fund market in India. A lower expense ratio comparatively on direct mutual fund schemes converts to a more return on the invested amount in mutual fund.

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## AI IN ADVERTISING: WITH REFERENCE FROM DEVELOPING TO MONITORING AND EFFECTIVENESS

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### ABSTRACT

*AI is the "science of making machines smart." That means making machines that can do intellectual tasks that humans can do. Tasks like: read, write, and understand text; see and identify objects; move around obstacles; hear and understand language; and sense the external environment. Once trained by humans, AI can go learn and improve on its own. The more data you give an AI system, the better it can learn and improve. Self-driving cars use AI to detect obstacles and drive safely. Every mile they drive gives them more data to improve their driving abilities. Siri and Alexa use AI to understand voice commands and predict what responses make the most sense. Every time you talk to them, they learn to improve the quality of their responses. In fact, AI isn't just one technology. It's an umbrella term that encompasses a range of smart technologies like these that can learn and improve on their own. Today's advertising relies on programmatic to target and deliver ads in real-time across the internet. AI is critical to the infrastructure that underlies advertising products on many platforms, though you may not always see it. Modern programmatic platforms often use AI to manage real-time ad buying, selling, and placement. AI can do all of these things and more. That's why forward-thinking companies are using AI to:*

- *Allocate advertising budgets, both across channels and audiences*
- *Adjust advertising budgets automatically to hit KPIs*
- *Find new advertising audiences and conversion opportunities*
- *Build richer audience profiles*
- *Determine and hit campaign goals*
- *Gain insight into competitors' ad spend, creative, and strategies*
- *Create advertising copy*
- *Create visual ad creative*
- *Hyper-personalize ad messages and images to individual consumers*
- *Hyper-personalize ad targeting*
- *Predict ad performance before launching campaigns.*

**KEYWORDS:** *Artificial Intelligence(AI), Advertising, Programmatic, Real Time Process, Hyper Personalize.*

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### Introduction

Since last decade there is tremendous growth in the advancement of online advertising. On this advancement Artificial intelligence (AI) is at the top with growth of around 100% and advancement in its way of working in advertising industries. For Digital advertisements, AI is an integrating tool. Online advertising works through data driven and bid data updation with billions of online digital touch points. AI technology reshape the online advertising and makes to more accurate, simple and interactive.

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AI involves Machine Learning (ML), Deep Learning (DL), Natural Language Processing (NLP), Natural Language Generation (NLG), in addition with application that qualifies AI algorithms. AI is required for making segmentation, improving advertising quality, creating personalized advertising content, optimize real time bidding process, monitoring and making effective advertising.

This study focus on utilizing AI in advertising with reference from developing to monitoring and effectiveness. This process is divided into four steps Advertising creation, Media planning and buying and evaluation.

There is a relationship between the utilization of AI in each step. It involves 45 advertising professionals and generated highly significant findings that In coming era, AI will redesign the advertising process and makes it more effective. As there is not much empirical research has been conducted on this topic so this study fills the gap between AI professionals and advertising field.

#### **AI Application in Media Planning and Buying**

In past, advertisers have conducted quantitative research through the data of media panels, scanner panels, IRI, Nielsen and then apply statistical tools/models understand the customer and study the advertising effect. At the same time, such datasets lacks with customization and comprehensiveness. In traditional research, generally segmentation applies to divide the market into large interpretable groups while making temporary assumptions about the homogeneity within each segment. It is unique from the existing method of execution of advertising in which advertisers traditionally buy Medias and execute offline, then after measure the effectiveness on post campaign through surveys.

#### **AI Application in Digital Advertising Performance Evaluation**

Ad impact means the acquisition of accurate and on time feedback from the impact of advertising in real time monitoring of media planning and buying. In case of measuring the impact of digital advertising with AI technologies such as Machine Learning and Deep Learning to collect real time feedback data from various channels like numeric, photos, voice, texts or videos. At present two channels convolutional neural networks are used to acquire multidimensional semantic information. For extracting and fuse feedback data, machine learning methods are used. By this way, the impact of advertising is measured with respect to the influence of advertising in comparison to initially planned goals.

#### **Literature Reviews**

##### **Kaplan and Haenlein, 2019**

AI means an ability of a system to properly interpret data, learning and analysis from such data and use these learning to achieve specific goals and tasks. The practical application of AI is quite wide as per product width and application in which AI plays an important role.

AI is defined as—a system's ability to correctly interpret external data, to learn from such data, and to use those learnings to achieve specific goals and tasks through flexible adaptation. AI is quite the buzzword in contemporary time. However, the practical application of some of these technologies may be a little bit vague about its meaning and the breadth of products and applications in which AI plays a role.

##### **Kietzmannel al, 2018**

AI deals with two types of data – structured data and unstructured data. Structured data includes traditional and standardized datasets like demographics, transactional history, browsing history. AI with its large analytical power can runs complex calculations on large volumes of such structured data in real time. Regarding unstructured data, AI provides written text, speech and images. It is fact that more than 75% of the around 2.5 billion gigabytes of user data generated are unstructured.

##### **Rodgers et al, 2017**

In the recent era, advertisers are well known about the power of social media and its available opportunities as people would like to spend more time on social media platforms. Social media advertisements plays a key role in building brands, lead generation, increasing attendees ratio, installing apps, etc. for marketers. There are mainly seven key digital advertising types that can be dragged in any ad format categories like search engine advertising, Banner advertising, advergaming, video ads, Mobile advertising, Social Media advertising and Native advertising. Those trends are driven from a content analysis that reviews from advertising industry's leading publications.

**Hanlon,2008**

Compare with traditional medias, social medias are more powerful and effective, the main reasons behind this was that opinions of peers would be considered as a most influencing recommendations.

**Qin and Jiang (2019)**

Ad agencies should conduct a complete advertising research, that will helpful to improve the positions of the brands, to predict preferences, monitoring progress and minimize the chances of failures. The application of AI combining with advertising research and market analysis. Data collection might involve through internet monitoring technologies for gathering online data for analyzing real time consumer data. There has been also notice that there is tremendous growth in converting unstructured data like pictures, audio/videos into analyzable content with the help of natural language processing (NLP) and preprocessing technologies.

**Benefits in Advertising**

- Target Ads More Effectively Through Data
- Helps Optimize Your Campaigns for Better Results
- Helps Save Money and Time With Increased Sales
- Reduce the Risk of Losses in Ads
- Improving Customer Experience
- Reach More Customers With Your Ads
- Defining Customer Journey

**Challenges of Using AI in Advertising**

- Accuracy of the Data
- Data Privacy
- Customer Behavior Changes
- Poor IT Infrastructure
- Lack of Trust
- Low Investment in AI
- Research Methodology

**Research Methodology****Objectives**

The aim of study is to understand the change in advertising sector is that Artificial intelligence will use different analytics and to find more about advertisers and their needs.

**Research Questions**

RQ1: What is the utilization of AI in the advertising creation?

RQ2: What is the utilization of AI in ad monitoring and evaluation for effectiveness of advertising campaigns?

**Methodology**

The methodology of this study adopted both a qualitative and quantitative approach to data collection.

- **In Depth Interview**

The methodology started with qualitative research by asking in-depth discussions with three Advertising professionals experienced of online sector.

Their experience and knowledge helps the researcher's understanding of the application of AI in digital advertising and improving the questionnaire design.

- **Online Survey**

At least 5+ years of experience selected professionals in online advertising through Google form.

**Population**

The population of this research includes all professionals in online/digital advertising can have experience on the client-side (30%) or the agency side (40%) or both (30%).

**Sampling Frame:** Convenient through LinkedIn

**Sample size:** 45

**Data Analysis:** After data was collected on Google form, descriptive statistics were created using the SPSS

**Descriptive Statistics**

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>S.D.</b>
RQ1	45	1	5	3.23	1.09
RQ2	45	1	5	2.84	1.05

**Reliability Statistics**

The study includes Cronbach's alpha that measures internal reliability for tests with multiple possible answers

**Results for RQ1****Q.1 What is the utilization of AI in the advertising creation?**

Reliability – 0.922

To Customize advertising texts and images based on consumer's background i.e. Demographic, psychographic and online

- Strongly Disagree - 18.1%
  - Disagree – 16.5%
  - Agree – 28.2%
  - Strongly Disagree – 20%
  - Neither Agree nor disagree 16.5%
- Average- 3.23 Cronbach alfa -0.908

In this question, around 46% of the sample agree that they apply AI to tailor ad texts and images based on the online consumer's demographics, psychographics, and online behavior. However, there is 35% of the sample are more inclined to the disagreement with this proposition.

**To use AI in creating Advertising copy?**

- Strongly Disagree - 28.30%
  - Disagree – 15%
  - Agree – 21%
  - Strongly Disagree – 20%
  - Neither Agree nor disagree 15%
- Average- 2.9 Cronbach alfa -0.926

In this question, there is a bipolar direction in its results. 43% of the respondents do not use AI in creating Advertising copy. On the other hand, there is 41% of the sample who agrees with the proposition

**To use AI in Designing Digital Advertising?**

- Strongly Disagree - 31.70%
  - Disagree – 21.0%
  - Agree – 11.70%
  - Strongly Disagree – 10%
  - Neither Agree nor disagree 26.70%
- Average- 2.483 Cronbach alfa -0.906

In the third question, there is an obvious direction towards disagreeing with using AI in Digital Advertising. More than 51% of the sample disagree. 26.7% of the sample are neutral and 21.7% agree with the proposition.

### Results for RQ2

#### What is the utilization of AI in ad monitoring and evaluation for effectiveness of advertising campaigns?

Reliability – 0.945

Use of Machine Learning (ML) and Deep learning (DL) to obtain real-time online consumer feedback on various digital advertising formats.

- Strongly Disagree - 23.30%
- Disagree – 10%
- Agree – 20%
- Strongly Disagree – 26.7%
- Neither Agree nor disagree 20%

Average- 3.10 Cronbach alfa -0.93

The largest percentage here goes for the respondents (46.7%) who agree with using ML and DL to assess consumer feedback. However, 33.3% (second largest percentage here) do NOT use ML and DL for the mentioned purpose. Only 20% of the sample are neutral.

USE of AI to monitor and evaluate campaign performance?

- Strongly Disagree - 16.70%
- Disagree – 18.30%
- Agree – 30%
- Strongly Disagree – 23.30%
- Neither Agree nor disagree 11.7%

Average- 3.32 Cronbach alfa -0.95

Results show that more than half of the sample use AI tech to evaluate the ads and assess online consumers' real-time responses. However, there is still 35% of the sample who do NOT use AI in the online ad monitoring and evaluation stage.

Testing ads with AI technology allows us to assess online consumers real-time responses?

- Strongly Disagree - 15%
- Disagree – 10%
- Agree – 28.3%
- Strongly Disagree – 30%
- Neither Agree nor disagree 16.7%

Average- 3.48 Cronbach alfa -0.94

More than half of the sample (58%) use AI to test advertising, and only a quarter of the sample does not do so. Thus, there is an apparent acceptance of AI testing advertisements with consumers real time responses.

### Regression Analysis

The study deployed a set of simple linear regressions to investigate the relationships between the independent variables and dependent variables.

In other words, this research designed regression analysis for two purposes. The first aim is to explore the connection between the utilization of AI in each stage in online advertising with AI usage in the next stage.

The second aim for deploying regression analysis is to test the connection between the utilization of AI in each of RQ1, RQ2 and the overall effectiveness of online advertising.

Model	Sum of square	Df	Mean square	F	Sig
Regression	29.213	1	29.213	70.304	.000b
Residual	24.101	58	0.416		
Total	53.314	59			

R Model	Understanding coefficient		Standard Coefficient	T	Sig
	B	Std. Error	Beta		
1 (constant)	1.878	0.223		8.435	0.000
Q^2	0.631	0.075	0.74	8.385	0.000

The regression model tested the relationship between the utilization of AI in Advertising creation and in advertising monitoring and effectiveness.

R square for this relationship is 0.548 which means that utilization of AI in advertising creation insights can explain more than 50% of the variance in the utilization of AI in creating online ads.

A simple linear regression was calculated also here to predict utilization of AI in media planning and buying (DV) based on the utilization of AI in Ad creation (IV),  $b = 0.74$ ,  $t = 8.39$ ,  $p < 0.001$

A significant regression equation was found ( $F(1,58) = 70.304$ ,  $P < .001$  with an R square of 0.548

Sig (.000) here means that the probability is very low that variation explained by the model was due to chance.

### Conclusion

As the digital era stepped in, advertisers and clients started to have access to a great deal of consumer online big data and leverage it to the benefit of the campaign.

Thus, the advertising process started to be less time-consuming with better creativity and more knowledgeable and impactful due to the nature of digital technology.

As time moved on, the concept of big data emerged leading to exponential personalized consumer online data readily available.

However, advertisers and clients realistically couldn't process all of the timely big data in an integrated way.

At this point, Artificial Intelligence has grabbed a foothold in online advertising. Brands and agencies have started to utilize AI and ML to deeply mine and explore the online consumer's lifestyle and his/her behavioral trajectories and update it near real-time. Being dynamic and Optimizing are two key properties for AI in advertising.

### Limitations

- Sample size, the researcher started the data collection with a target sample size of 45.
- From Respondents, some are saying that questionnaire is somewhat challenging.
- Although the samples size was of 45 respondents, the findings and relationships in this process model of the study were highly significant. There is consistency in result then also variances in the segmentation criteria's like Geographical and demographics of the sample, experience, background (client agency or agency side)

### Future Research

- It is a significant recommendation to empirically measure the direct relationships between utilization of AI in Ad creation stage and at Utilization stage that can be inference from literature review and post survey interviews.
- The study can be more extended to the global perspectives of digital advertisers with much more resources.
- The research study can be also apply to various industry specific like FMCG, Health care, etc. it may give more interesting findings.
- The process model can be extending to measure the impact of AI on Integrated Marketing Communications to combine both traditional as well as digital advertising techniques.
- The research study only focuses on experts' interviews and findings of the study from the generic design. However, the Process model can be extend in terms of AI software and tools.

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## INDIA'S BANKING SECTOR ANALYSIS AFTER COVID-19

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Mr. Roop Singh Gehlot\*  
Dr. Mangu Ram\*\*

### ABSTRACT

*Since India gained its independence in 1947, it has been clearly obvious that the banking industry in India has been an important contributor to the overall socioeconomic growth of the nation. Every nation's finance and banking industry is often regarded as the "heart and soul" of the country's economy. It is the most crucial support for any form of financial sector, and it is a vital component in the growth of an economy in a particular nation. In this paper, we make an effort to analyse and investigate the banking industry in India both before and after the adoption of Covid-19. We do so by comparing the two periods. The influence that COVID-19 has had on the general population is another important issue that will be discussed in this study. This was achieved by selecting respondents at random, and their comments were summarised by making use of graphs in order to make the information easier to comprehend.*

**KEYWORDS:** Banking, Consumer, E-wallets, Covid-19.

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### Introduction

India is not just the country with the largest democratically elected populace in the world; it is also a monetary goliath that is always growing. There is no way for a nation to have a robust economy without first establishing a financially sound foundation. When it comes to a nation's overall economic development, banks represent an essential component. They pool the people's dormant savings and then make those funds available for speculative use. They also establish new interest stores throughout the period that is spent enabling credits and buying venture precautions. By allowing and managing bills of trade, they encourage and facilitate business not just inside the nation but also outside its borders. The mobility of money is increased even further by banks. India's economic system has, over the course of the last thirty years, resulted in a number of unexpectedly impressive achievements. At this moment, it is not limited to only the urban areas; rather, it has spread all the way to the most remote sections of the nation. One of the reasons for India's continued economic expansion is due to this aspect. At the present time, one of the most important supporting divisions in India is the banking industry. It is really necessary for the expansion of the economy that value administrations be easily accessible. The retention of existing customers has surpassed the acquisition of new customers as the major emphasis of banking institutions. The way that the financial sector does business has been progressively modified as a result of the introduction of data innovation into the financial division. Various customer-focused innovations, such as internet banking, ATM administrations, telebanking, and electronic payment processing, have helped to alleviate some of the stress that clients experience.

Customers are able to check their account balances and do other financial transactions via the use of internet banking, which eliminates the need for them to physically go to a bank branch. The department that deals with credit cards and automated teller machines has updated the options that are available to customers. Banks also serve as alternative entryways for making payments by virtue of annual cost and online payment of a variety of bills including the phone, electricity, and assessment. The administrations that banks provide are admirable in today's economy, when individuals don't have a perfect opportunity to make these instalments simply by waiting in line, because of this, the banks'

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services. The engagement of the advancement banks in the betterment of the less developed areas is one of the organisations whose contribution is well recognised but not emphasised to the same degree as it should be. Although these groups have taken on a variety of responsibilities, including advancing, supporting, backing, and monitoring a wide range of activities, their most significant capacity has been as drivers of a mechanical shift in the events that have occurred.

The purpose of this research was to investigate the ways in which Covid-19 has impacted the financial services sector. In a nutshell, it provides an overview of the state of the banking business and the processes that were in place at the time, as well as how those procedures have evolved in light of the larger context. The following is the primary purpose that the research piece aims to achieve:

- To get an understanding of the monetary impact that COVID-19 will have on the banking sector by taking into consideration the relevant entities.
- The change in client attitudes toward the banking business and a comparison of those attitudes (both before and after the release of Covid19).

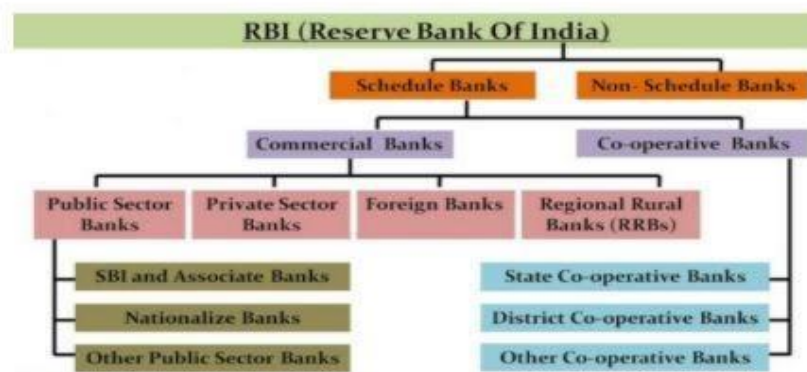
### Research Methodology

The following study will evaluate the impact that Covid-19 and the shutdown had on the banking industry in India with the intention of drawing conclusions and making recommendations. In order to achieve this objective, a few focal points have been selected from the present literature that can be found on a range of websites on the internet. This was done in order to facilitate the achievement of the aforementioned objective. These key themes are offered as highlights from talks with important business experts, subsidy heads, monetary and financial consultants, senior authorities of monetary organisations, Chambers of commerce and industry, and worldwide organisations such as the World Bank and the IMF. In addition, expanding groupings such as businesses that provide counselling services, multinational organisations, and central banks have mentioned research papers and publications on the subject of the impact of the crown on India's budgetary division. These papers and publications focus on the subject of the impact of the crown on India's budgetary division. When attempting to arrive at a suitable conclusion for this piece of writing, the key material that was accessible in a variety of forms and came from a variety of sources was carefully examined and analysed. It is important to note that the kind of study being done here is an exploratory one. As a result of the inaccessibility of quantitative information un the post-Covid-19 circumstances, it was not possible to make use of measurement equipment.

Random sampling was used throughout the process of collecting these data for the purpose of this investigation. At the beginning of the inquiry, a sample size of 135 was determined to be appropriate. The information was collected by giving each of them a questionnaire that they had to fill out on their own. After a few adjustments and deletions, the final questionnaire was written and emailed.

The analysis of the gathered data was carried out by using simple statistical inference methods such as frequency and percentage, amongst others. The analyses are presented in a graphical format for the sake of making them simpler to understand.

### Indian Banking System



Source: [https://www.jagranjosh.com/general-knowledge/structure-of-banking-sector-in-india\\_1448530019\\_1](https://www.jagranjosh.com/general-knowledge/structure-of-banking-sector-in-india_1448530019_1)

The financial sector of India is the most pervasive part of the country's economy, and it plays a significant part in the country's overall monetary development as well as economic growth.

Banks contribute to the expansion of the economy by assigning reserve funds to speculations that have the potential to produce higher earnings. This practise helps banks channel reserve money into speculations, which in turn encourages economic growth. The financial infrastructure of India is robust and may be broken down into two categories: commercial banks and co-employable credit institutions. There are a few different kinds of business banks, the most common of which being scheduled business banks (SCBs) and unplanned business banks. Additional subtypes of savings and checking banks include territorial province banks (RRBs), private banks, unknown banks, and open area banks (PSBs) (RRBs). Credit foundations that everyone can agree on integrate the many banks that may be used together.

### **Review of the Literature**

The Indian government has declared that there would be a complete lockdown throughout the nation beginning on **March 24, 2020**, in an effort to combat the COVID-19 outbreak. This announcement was followed by a stage in which the lockdown will be extended until May third, 2020. Even while the government shutdown was required and inevitable to prevent the more rapid spread of Novel Coronavirus (Covid-19) and to save the lives of people in the nation, it had a devastating impact on the many different sectors of our economy. The Banking and Non-banking money organisations (NBFCs) that represent the backbone of India's economy are not an exceptional case contrary to what was mentioned before in this paragraph. This article is an effort to assess the impact that the pandemic has had on banks and non-bank financial companies (NBFCs) as a result of the lockdown that has ensued as a result of the epidemic. The lockdown has resulted in the closure of every business association, educational foundation, public and private workplace, suspension of methods for transportation, and so on. (**Singh &Bodla, 2020**)

Trade, business, and industry cannot exist without the essential lifeblood provided by finance and banking. The financial services sector serves as the main support system for modern businesses. The expansion of any country is almost entirely dependent on the commercial and banking systems. A financial institution known as a bank deals with deposits and advances, in addition to other services that are connected with banking. It does this by accepting deposits from those who have a desire to save money and then lending that money to others who have a need for it. The financial system is one of the most basic and important aspects of human life. People in today's world, with its emphasis on a faster pace of living, may not be able to make acceptable changes without first establishing the necessary financial network. Nationalized banks have a significant amount of influence on India's financial system. It is possible that the success of no other industry is more intimately linked to the state of the economy than that of the banking business (**NileshLimboore and others, 2014**).

A paradigm change occurred in banking operations as a direct result of the enormous benefits in innovation as well as the potent mix of innovative data use. Internet banking, which has fundamentally altered the way financial transactions are conducted on a worldwide scale, has emerged as the principal focus of several research projects in every region of the world. In any case, there has always been a dearth of written material on the issue in India. This research was conceived with the intention of contributing to the filling in of important information gaps about the Internet banking industry in India. The study provides information that was collected by doing research on the websites of business banks. This information includes the number of business banks that provide Internet banking as well as the products and services that these banks provide. A univariate quantifiable inquiry is used to investigate the profiles of company banks that provide Internet banking. These profiles are compared to profiles of other business money maintainers regarding advantages, cost efficiency, and other aspects. Before the end of the first quarter of 2004, there was a growing disparity between banks that offered Internet banking and those that did not provide Internet banking with regard to the amounts subsidised, the wellsprings of pay and usage, and the proportions of performance. In addition, it was shown that the benefits and availability of internet banking do not have any significant connections to one another (**Singh & Malhotra, 2004**).

### **Performance of Banking Sector Post COVID-19**

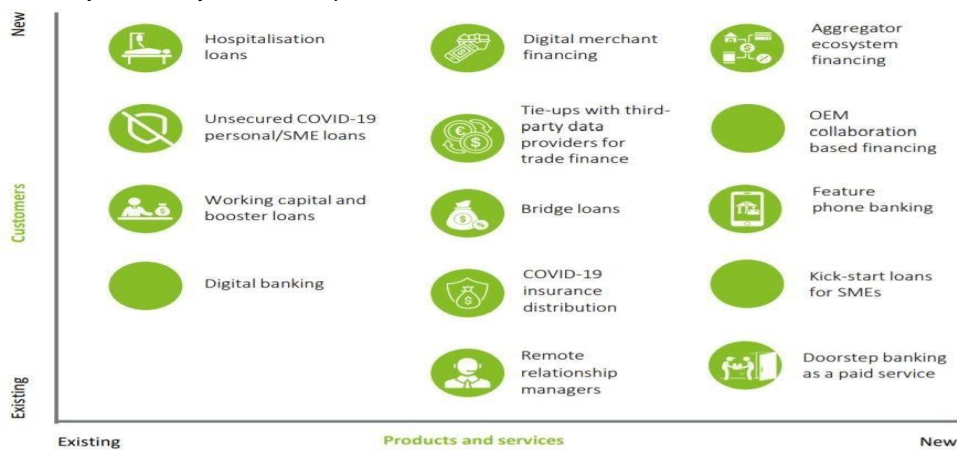
Since the onset of the Novel Corona outbreak in India, the value of the country's banking stocks has seen a significant decline. For instance, the benchmark file for India's banks, the Nifty Bank index, has seen a significant decline since the beginning of March. The growth of new loans issued by Kotak Mahindra Bank slowed to 6.7 percent in the first quarter of the current year (i.e. 2020), the slowest rate in

any manner over the last three years. This number is a significant drop from 10.3 percent in the previous three months. Compared to its peers, HDFC Bank has the lowest rate of seriously delinquent obligations. However, Aditya Puri, the managing director of HDFC Bank, said that their policies regarding the acceptance of new loans have become more stringent.

At the beginning of March, it was determined that the effect of Coronavirus on Non-Banking Financial Companies (NBFC) was "genuinely unimportant." This was due to the fact that the sluggish economy continued to be one of the primary stresses. However, after a period of fourteen days, the financial sector seemed to be the focus of attention, as the whole country was hit by a lockdown, and businesses were therefore forced to shut down. According to an evaluation research conducted by Emkay Global and titled "For Asia-Pacific Banks, COVID-19 Crisis Could Add USD 300 Billion To Credit Costs," the impact of the pandemic on income during Q4FY20 would be minimal. In any case, the full effect of Covid-19's involvement in the development process won't be obvious until Q1FY21.

The following are some of the categories that may be used to classify the problems that banking institutions face across the board in their operations:

- Products • A drop in consumer demand for credit, brought on by a slowdown in business activity and a reduction in discretionary spending • A slowdown in the growth of deposits and investments, brought on by additional rate cuts and increased market volatility.
- The branches' sales and service departments • A decrease in revenues generated at branches as a result of fewer customers making walk-in purchases • Limited serviceability as a result of fewer staff members and shorter operating shifts • Limited serviceability resulting from fewer staff and shorter operating shifts as a constraint •
- Commercial and service, with a reference to the many additional physical networks • Certain actions are not allowed because of the limits placed on travel and the fact that people do not fully comprehend the relevance of banking correspondents as a kind of service.
- Sales and servicing - digital s • Constrained capacity – As a result of increased volume and a variety of service demands via digital channels....
- Operations • Low productivity resulting from a lack of suitable infrastructure as well as staff-given manual procedures. This is caused by both of these factors together.
- Collections • Decreased collections as a direct consequence of interruptions to physical collections, a lower capacity to pay, and a moratorium.
- Concerns about data privacy and information security in the context of cyberspace, in view of a rising dependence on contactless channels
- Challenges Facing the Treasury and Capital Management • Problems Facing the Liquidity Management Despite the Limits on Lending, Banks Have Excess Liquidity; Other Types of Financial Companies Also Have Limits on Their Liquidity
- The People's • Low worker productivity and morale – Caused by strict constraints and fears about job security 9. The People's 9. Individuals'



Technology s • Reduced data access - the inability to access data or systems, which ultimately results in limited serviceability s • Limited data access — An inability to access data or systems, which results in limited serviceability s • IT limits — Limited bandwidth and system capabilities, as well as architectural constraints s On the other hand, the banking industry has been presented with a number of possibilities as a result of the pandemic:

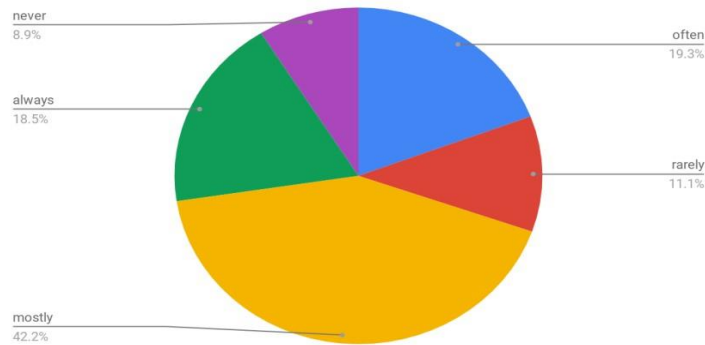
**Data analysis and Discussion**

The following table represents the responses received from people of different age groups

Age Group	Number of Responses
15-18	14
18-25	35
25-35	38
35-45	30
45 and above	18
<b>TOTAL</b>	<b>135</b>

**E-payments, internet banking (Pre-Covid-19)**

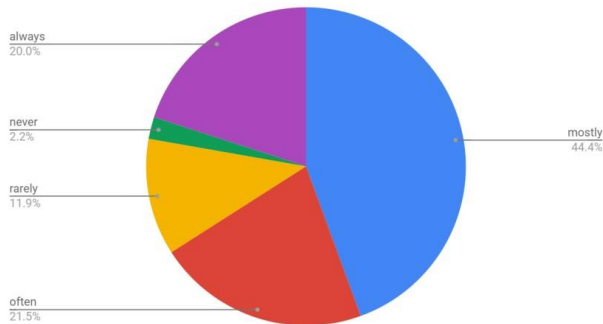
Chart: 1



As can be seen from the data that was given before, the number of individuals who used the services that were made available by online banks was not very pleasing in contrast to the technical breakthroughs that were taking place in the nation at the time. A handful of the respondents did not have a complete comprehension of the e-payment system since they preferred to make cash payments to local businesses for the products that they had bought rather than using an online payment method.

**E-payments and other online banking services are used (Post-Covid-19)**

Chart: 2

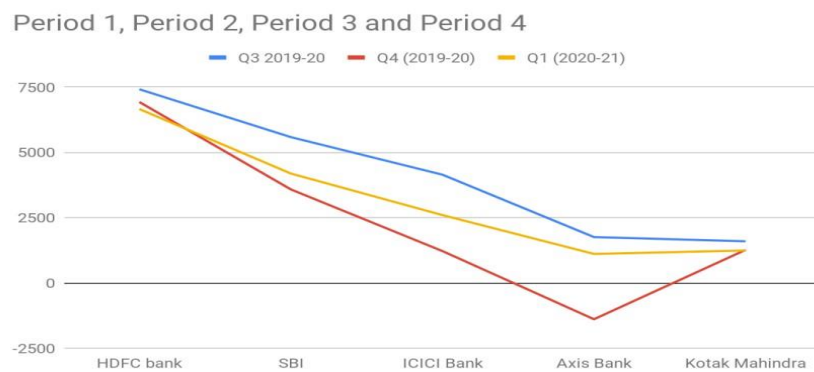


The above data allows us to draw the conclusion that a significant number of respondents have transitioned to and become used to using online banking and payment services. As a result of the nationwide lockdown that was carried out, individuals were afraid to physically visit their banks; thus, the

vast majority of people began using various types of internet banking instead. Even those who only used online banking sometimes and preferred to travel to the bank in person have switched to using online banking and e-payments as their primary method of financial transaction.

#### People had problems with banks before and after the Covid-19 era

Customer problems	Number of responses (pre-covid-19)	Number of responses (post-covid-19)
Waiting in ATM lines	43	16
Waiting for the account to be created	22	17
Lack of awareness of online banking services	21	23
Lack of source to use the facilities	18	21
Concerns about safety and privacy	10	18
Cheque/Funds bouncing	12	15
others	9	5



#### Financial Effect of Covid-19 (Top 5 Indian Banks by Market Share)

As can be seen in the graph that is located directly above this one, each of the five largest banks in India in terms of market share, namely HDFC Bank, SBI Bank, ICICI Bank, Axis Bank, and Kotak Mahindra, saw a decline in their profits during the first quarter of the financial year 2020-21. Kotak Mahindra was the only one of the five banks that saw a rise in profits during this time period. At this time, the whole nation was put under lockdown, and only a select few branches were functioning across the country. As a result, only a very tiny proportion of the population was able to directly access financial services.

During the last three months of the fiscal year 2019-20, Axis bank recorded a loss of 1,387 crore. This was due to the fact that the bank invested a sizeable sum of money into provisions and reserves in light of the precarious state that the economy of both the nation and the world was in at the time. Specifically, this was because of the state that the economy of both the country and the world was in. After the end of the first fiscal quarter, the surviving financial institutions began to get back on their feet, and the lockdown was progressively removed all around the country. This occurred at the same time when the firm resumed normal operations.

#### Suggestions

- The Reserve Bank of India (RBI) is required to take all possible actions to maintain adequate liquidity in the financial system and its constituents despite COVID-19.
- Sufficient bank credit streams are essential for getting small and medium-sized businesses back on track after the lockdown is lifted.
- The government is required to make choices and activities to reduce vulnerability and financial worry in the economy.
- Taking into consideration the current state of affairs, individuals should make the transition to using online banking and electronic wallet payment services in order to carry out their financial transactions.

- The government should sponsor awareness initiatives to educate the public on the benefits of switching to online banking as well as the need of making the switch.
- The Reserve Bank of India need to promote these online services and reduce the interest rates that are charged on e-wallet and upi payments.

### Conclusion

The perspectives that were discussed before bring to light, in a nutshell, the following concerns with regard to the banking sector both before and after the Covid-19 conclusion:

- The Indian banks were able to reduce the overall amount of damage they sustained thanks to careful preparation and provisions; now, they are working hard to recover fully from the effects of the earthquake.
- Customers' banking routines and techniques have also undergone significant shifts; as a result, they have become more confident in the reliability of online banking services and have started turning to them for the majority of their banking needs rather than going to the bank in person.
- During this time period, the infrastructure of online banking has advanced significantly, and the user interface has been friendlier to customers.
- The Reserve Bank of India has contributed \$6.5 Billion In addition, as a further move, the Reserve Bank of India (RBI) injected an additional \$6.5 billion in cash for banks, which they may then lend to shadow lenders and small borrowers. In addition, the Reserve Bank of India (RBI) has lowered the standards' deadlines for problematic loans and barred lenders from paying dividends for the fiscal year that will conclude on March 31, 2019.
- In the not-too-distant future, online banking, electronic wallets, and payments made through the Unified Payments Interface (UPI) will be the way to go because they eliminate the need for human interaction and are becoming extremely secure as more money is invested in the development of applications with increased safety features.

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## CRITICAL ANALYSIS OF CARBON MARKET

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Pooja Choudhary\*

### ABSTRACT

*Emissions trading, also known as 'carbon market' is one of the two instrument of carbon pricing the other one being 'carbon tax'. Carbon market is becoming increasingly popular in environmental law and is based on the 'polluter-pays principle'. It's a market where a set number of emissions permits, which typically entitle the holder to emit one tonne of CO<sub>2</sub>, are allocated and can be exchanged between emitters on the basis of a non-determined carbon price. Since the global carbon market has not yet been established, national or subnational emissions trading systems are being developed around the world. There are a number of issues which plague the carbon market as of now. This research is intended to discuss such issues namely the problem of low quality carbon credit offsets, problem of ghost carbon credits also called as 'phantom carbon credits' etc. There are problems with the way the carbon emissions are calculated. Global warming is not caused by emissions today. It is caused by the accumulation of CO<sub>2</sub> emissions over hundreds of thousands of years. The carbon credits do not have equal value. This is because the carbon credits market, like all voluntary markets, is not regulated. Therefore, various factors influence the final amount or price of a carbon credit. The paper also checks the claim that carbon offsets are not sustainable because poor countries are compensated for offsetting carbon while rich countries continue emitting, which helps maintain the economic gap between developed and third world nations. It has been found that carbon market is incredibly effective if it meets standards and is permanent. It has been concluded that the carbon markets though are integral and should be part of a greater sustainability plan, but it is not the only solution. Hence, certain alternatives of carbon markets which are emerging in the world which includes the concept of green finance has been discussed in this paper.*

**KEYWORDS:** Carbon Market, Carbon Tax, Environmental Law, Phantom Carbon Credits, Green Finance.

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### Introduction

The Annexure B Parties to the Kyoto Protocol are countries that have agreed to reduce or cap their emissions. The targets are expressed in assigned amounts or permitted emissions over the commitment period (2008-2012). The permitted emissions are divided into AAUs (Assigned Allowable Units). Emissions trading allows countries that have emission units that are "allowed" but not "used" to sell this excess capacity to countries that are meeting or exceeding their targets.

Pursuant to this, emission reduction or removal becomes a new commodity. Since CO<sub>2</sub> is the primary greenhouse gas, the term "carbon trading" is often used to describe trading in such a commodity. Today, carbon is traded and traded like other commodities. This is called the "carbon market." A carbon credit is one of the units of exchange that people and companies use to compensate for their greenhouse gas emissions. A carbon credit (also known as an offset in the Voluntary Carbon Market (VCM)) is the equivalent of one metric ton of GHG avoided or reduced from being released into the atmosphere. Market dynamics or the supply and demand, project costs and location, and the project developer all impact how much is the worth of each credit. So, the results of measuring and accounting for carbon credits can vary a lot, depending on those factors. Carbon markets are said to be effective in controlling the emissions of the GHG but are also criticised on various grounds. And they have criticisms for good reason. These concerns emphasise the necessity for high-quality carbon offset initiatives that benefit the environment and for global policy reform to support the efficient reduction of carbon emissions.

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### **Carbon Markets Mechanism**

A mechanism for the carbon market can be established at three levels viz, at the global level, , at country level, or at the state level, depending on the geographical coverage of the emissions. In an emissions trading scheme, regulated companies can lower their emissions by, for instance, putting money into cutting-edge, low-carbon technology or removing greenhouse gases from the environment, and then selling the extra allowances that come from their investment on the market. Another option for some is of purchasing credits from the market that is more practical than lowering their own emissions.

The principles underpinning carbon markets were laid out in the 1997 Kyoto protocol, but so far there has been little, if any, quantifiable GHG reduction that these measures have achieved. The two most significant carbon markets – the EU-ETS and the UN's carbon offsetting scheme (CDM) – have not delivered on their promises, but new carbon markets built on these schemes are planned in developed and developing countries alike.

At the 21st Conference of the Parties (COP 21) the Paris Agreement was agreed to by the United Nations Framework Convention on Climate Change (UNFCCC) At COP 21, the Paris Agreement was agreed to by the twenty-first Conference of the Parties to the UNFCCC with the aim of keeping the average global temperature rise well below two degrees Celsius and continuing efforts to limit the increase to one and a half degrees. The Paris Agreement's Article 6 lays the foundation for international recognition of co-operative carbon pricing models and outlines new ideas that could open the way for such co-pricing to take place. Carbon pricing has grown significantly over the past few years, but in many cases, these efforts are still in the early stages of impact. Some policy makers have set carbon prices at low levels to attract political support. However, the implementation of carbon pricing policy frameworks and institutional structures is by no means the end-all-be-all for increasing ambition and impact in the future.

### **Carbon Market Practices**

- **Organisation for Economic Co-operation and Development (OECD)**

OECD launched Carbon Market Platform in 2015 under Germany's G7 presidency. It aimed to bring together diverse group of countries and organisations to strengthen the international co-operation on developing sustainable, effective and ambitious carbon pricing approaches or methods. The Platform's flagship event is the Annual Strategic Dialogue which has been taking place annually since the year 2016.

- **The EU Emissions Trading Scheme**

Launched in 2005 to comply with the Kyoto Protocol, the EU ETS is the world's first largest carbon market covering the EU's most polluting industries, including thermal and electricity production, energy-intensive industries (oil refineries, steel production, commercial aviation) and more. Since its inception, the ETS has helped to reduce emissions covered by it by more than 40%. However, the system has not been without challenges, including the decline in carbon prices caused by an overhang of allowances in the face of the global financial crisis, which was addressed by the introduction of the Market Stability Reserve (MSR) in 2019.<sup>1</sup>

- **China's National Emissions Trading Scheme (ETS)**

The Emissions Trading Scheme (ETS) was launched in July 2021, requiring over two thousand large emitters in the energy industry to report their emissions for 2019 and 2020. Currently, the ETS covers annual emissions of nearly 4.5 billion tons of CO<sub>2</sub>, or about 40% of China's total emissions.<sup>2</sup> Unlike similar schemes in other countries, such as the EU, China's allocation of ETS allowances is not decided in advance via an absolute cap, but rather based on emissions intensity. A single ETS allowance allows a company to emit one tonne of CO<sub>2</sub>. So far, the ETS has traded 412.05 million tons of allowances, including regional pilot schemes and domestic offsets.<sup>3</sup>

- **Carbon Market in Brazil**

Brazil has no regulated carbon market as of now. The draft law (Bill 528/2021) that defines the Brazilian carbon market (MBRE) is currently in the hands of the Congress awaiting passage. The aim of this bill is to combine carbon credits with measures to reduce or eliminate greenhouse gases (GHGs).

<sup>1</sup> <https://unfccc.int/process/the-kyoto-protocol/mechanisms/emissions-trading>

<sup>2</sup> <https://chinadialogue.net/en/climate/the-first-year-of-chinas-national-carbon-market-reviewed/>

<sup>3</sup> <https://www.iea.org/reports/chinas-emissions-trading-scheme>

Provisional measure 1,151 was approved on 26 December 2022 by the Government of former President Jair Bolsonaro, which amends the rules governing the management of public forests, allowing the trading of carbon credits through concessions in protected forest areas. The measure has the potential to significantly increase the market but still needs to be approved by the Congress. In May 2022, a new presidential decree regulating the national policy on climate change set out procedures for the development of sectoral plans for the mitigation of climate change, enabling the systematic operation of a carbon market.

- **Carbon Market in Australia**

The Clean Energy Regulator monitors Australian carbon markets for the Emissions Reduction Fund, which supplies Australian carbon credit units (ACCUs) and the Renewable Energy Target. The regulator developed tradable LGCs (large-scale generation certificates) and tradable STCs (small-scale technology certificates). Participation in the ERF is voluntary and offers concessions for a variety of organisations and people to adopt new processes and techniques to reduce emissions. The Clean Energy Regulator (CER) is the largest purchaser of ACCUs. But there is growing demand from businesses and other government bodies, and some purchasers are looking for ACCUs with additional ancillary benefit.<sup>1</sup>

- **Carbon Market in New Zealand**

The New Zealand Emissions Trading Scheme (NZ ETS) which was propounded in 2008 is at the heart of the country's climate change mitigation strategy. It covers approximately 50% of New Zealand's greenhouse gas (GHG) emissions. The NZ ETS is the main instrument used by the Government to reduce greenhouse gas emissions. It is set up by the Climate Change Response Act 2002, which consolidates all of New Zealand's key climate legislation into one Act. In 2020, extensive legislative reforms were made to the NZ ETS to enhance its design and operation, and better support New Zealand's international and domestic obligations to reduce emissions.<sup>2</sup> All sectors of the New Zealand economy participate in the New Zealand ETS in various ways. All sectors subject to the scheme must report their annual GHG emissions to the government.<sup>3</sup>

- **Carbon Market in India**

India does not have a regulated carbon market. In March 2023 a proposal of the Carbon Credit Trading Scheme (CCTS) was released by the Ministry of Power. The draft establishes the institutional mechanisms for the functioning of the carbon credit market. The draft of CCTS outlines the organisational structure required for the establishment and operation of the domestic carbon market. The draft defines the roles and responsibilities of the administrator, the regulator (India Carbon Market Governing Board), the registry (the Grid Controller of India), the trading regulator (Central Electricity Regulatory Authority), exchanges and requirements for appointment of the auditor and to develop methodologies.<sup>4</sup>

- **Carbon Market in United States**

In the United States, no national carbon market exists, and only one state – California – has a formal cap-and-trade program. 12 states, representing more than 25% of the nation's population and about one-third of the country's GDP, have active carbon pricing programs and are reducing their emissions. These states include California and the 11 northeastern states that comprise the RGGI (Regional Greenhouse Gas Initiative), which is the first federally mandated cap and trade program in the US to decrease carbon dioxide emissions in the energy sector.

### Limitations of Carbon Markets

- **Problem of Cap and Trade System**

Cap-and-trade is a system that puts a limit on aggregate emissions from a group of emitters by setting a "cap" on maximum emissions. Cap and trade meant to be way to reduce emissions of pollutants by setting a "cap" on total emissions from certain emitters. It's a market-driven system that encourages businesses to invest in energy efficiency and other cleaner options. It's been suggested that the cap and trade could lead to too much pollution up to the government's cap, since the allowable levels could be too high, which would actually slow down the transition to cleaner energy sources. Plus, the cost of emissions credits, penalties, and fines for going over the cap is usually lower than the cost for moving into a green technology. That would be for industries that rely on fossil fuels for an instance. So, there's not much of an incentive for them to switch.

<sup>1</sup> <https://www.cleanenergyregulator.gov.au/Infohub/Markets/Pages/About-Carbon-Markets.aspx>

<sup>2</sup> <https://icapcarbonaction.com/en/ets/new-zealand-emissions-trading-scheme>

<sup>3</sup> <https://environment.govt.nz/what-government-is-doing/areas-of-work/climate-change/ets/>

<sup>4</sup> <https://www.asifma.org/resource/indias-draft-carbon-credit-trading-scheme-ccts/>

- **Lack of Uniformity in Carbon Pricing Method**

There are five main drawbacks to carbon pricing that limit its ability to accelerate deep decarbonization: It frames climate change as an imperfect market failure rather than a systemic issue It puts a premium on efficiency rather than effectiveness It tends to incentivize optimization rather than transformation It suggests a broad policy approach rather than a context-sensitive approach It does not reflect political realities There is no global standard for measuring the price of carbon offsets It is hard to achieve price through demand and supply because it is largely not formulated. <sup>1</sup>

- **Absence of Global Carbon Market**

International carbon markets have the potential to reduce global green house gas emission in a cost effective manner. Emissions trading systems are on the rise globally. In addition to the EU ETS, national or subnational systems are already in place or in the process of being set up in Canada, in New Zealand in China, in Japan, in Switzerland in South Korea, and in the United States. However, the international carbon market has yet to emerge. It will solve many problems of the carbon market and will most likely provide carbon pricing and carbon trade standards. Compatible emissions trading systems can be linked to each other. This allows participants in one scheme to access units from another scheme for compliance. For instance, in the year 2017 the Union also signed an agreement with Switzerland to connect their systems.<sup>2</sup>

- **Problem of Phantom Credits**

Large chunk of certified carbon offset credits is of poor quality, the logic behind carbon credits fails. Verra, the global leader in voluntary offsets for the rapidly expanding \$2 billion (£1.6 billion) market, has been subject to research which has revealed that the majority of its rainforest credits that were offsetted, which are among the most commonly utilised by companies, are likely to be "phantom credits" and do not represent real carbon reductions.<sup>3</sup> That means they're not really representing the actual reductions of carbon they claim to do.

- **Carbon Cowboys**

Carbon cowboys are the middlemen working in poorly governed carbon markets who are paying offset project developers and communities in the Global South less than what they deserve. Carbon Cowboys sell credits at high margins to buyers in developed economies. As a result, brokers, retailers, and carbon cowboy dealers have been subject to regulatory scrutiny. According to a watchdog group, 90% of intermediaries do not disclose the fees or profits they earn from disposing such carbon credits in the Voluntary Carbon market. This lack of transparency and corrupt practices in the financial transactions within the carbon market is concerning and alarming. <sup>4</sup>

- **Limitations of Voluntary Carbon Markets (VCM)**

VCM operates outside of regulated systems and allows businesses and individuals to buy carbon offsets at their own risk without any obligation to use them for compliance. The voluntary market struggles from many inefficiencies that limit its potential impact. These include transparency and traceability regarding carbon credit transactions. <sup>5</sup>They struggle from a total lack of transparency and standardization, which leads to confusing and unorganized marketplaces, and thereby making scaling up a major pain.

### **Inherent Limitations of Carbon Offsets**

There are two major drawbacks to carbon offsets. The first is that offsets are not a "win-win" situation. Carbon offsets are only one tool in the effort to reduce emissions, and many organizations don't have the internal tools to develop a comprehensive net zero strategy and need to invest in green investments. The second downside is that there are no global carbon standards in place. While Europe, the US, and others have their own carbon standards in place, policy adaptation is needed.

- **Problem of Greenwashing**

Greenwashing is an environmental claim made by an organization about something it is doing in order to create a perception of an environmental impact that does not exist. A greenwashing is usually about some kind of positive environmental impact. Instead of greenwashing a climate crisis, let's focus on

<sup>1</sup> State and trends of carbon pricing (English). Washington, D.C. : World Bank Group.

<http://documents.worldbank.org/curated/en/598811476464765822/State-and-trends-of-carbon-pricing>

<sup>2</sup> [https://climate.ec.europa.eu/eu-action/eu-emissions-trading-system-eu-ets/international-carbon-market\\_en](https://climate.ec.europa.eu/eu-action/eu-emissions-trading-system-eu-ets/international-carbon-market_en)

<sup>3</sup> <https://www.theguardian.com/environment/2023/jan/18/revealed-forest-carbon-offsets-biggest-provider-worthless-verra-aoe>

<sup>4</sup> <https://www.fenixcarbon.com/learn/7-signs-carbon-cowboy>

<sup>5</sup> <https://www.nasdaq.com/articles/why-voluntary-carbon-markets-fall-short-in-the-fight-against-climate-change>

the root of the problem – fossil fuel emissions and the decimation of ecosystems. For real climate action to be effective, the biggest emitters (historically and now) must drastically reduce their emissions and provide loss and damage compensation for the most vulnerable people and regions. Carbon offsetting projects overstate the carbon savings. Carbon removal or “nature based solutions” is greenwashing at its finest. Instead of preventing climate breakdown, carbon offsets threaten livelihoods and human rights as well as biodiversity. Therefore, we should reduce emissions, not offset them.

Hence it is clear from the above that the carbon markets suffer from many limitations which are still to be addressed.

### Conclusion

One of the key findings of the study is that the carbon market is highly efficient if it meets the right criteria and is long-lasting. Carbon markets would work well if the above limitations were removed and a global market is set up which is the goal of the Paris agreement. Today, in the absence of any global standard for trading in carbon emissions, the problem of phantom carbon credits, problem of carbon pricing arises. Most of the problems are aggravated by the voluntary carbon market which does not follow any rules as such and is left at the whims and fancies of those at power. Carbon markets are an essential part of a larger sustainability strategy, but they are not the end solutions. Therefore, there are several alternative carbon markets that are emerging around the world to address the root cause of global warming. Below are some alternatives that are changing due to the limitations of carbon markets themselves.

- **Green Bonds**

Green bonds are fixed income instruments that are specifically issued to fund climate and environment-related projects. Green bonds are generally asset-backed and covered by the issuer's balance sheet, meaning they typically carry the same rating as the issuer's other outstanding debt obligations. Green bonds date back to the early 2000s and are sometimes called climate bonds, though the terms are sometimes used interchangeably.

- **Green Guarantees**

What is a bank guarantee? A bank guarantee is an unconditional commitment made by a financial services group to pay a party in the event that another party defaults on its obligations. A Green guarantee secures the contractual obligations of a business and links them to the utilisation of proceeds from the sale of sustainable assets and environmentally responsible projects. A good example of a Green guarantee is the GGC (Green Guarantee Company) created by Green Climate fund project.<sup>1</sup>

- **Carbon Tax**

A carbon tax, on the other hand, directly imposes a price on carbon. It does so by setting a tax rate on GHG emissions or, more commonly, on fossil fuel carbon. A carbon tax is imposed on organisations that emit greenhouse gases, thereby discouraging them from doing so by imposing a financial penalty. An example of this is the EU's carbon border adjustment mechanism (CBAM).<sup>2</sup>

### References

1. State and trends of carbon pricing (English). Washington, D.C. : World Bank Group retrieved from <http://documents.worldbank.org/curated/en/598811476464765822/State-and-trends-of-carbon-pricing>
2. Briefing on EU carbon border adjustment mechanism: Implications for climate and competitiveness retrieved from
3. [https://www.europarl.europa.eu/thinktank/en/document/EPRS\\_BRI\(2022\)698889](https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2022)698889)
4. [https://www.ieta.org/resources/Reports/The%20Evolving%20Voluntary%20Carbon%20Market\\_web.pdf](https://www.ieta.org/resources/Reports/The%20Evolving%20Voluntary%20Carbon%20Market_web.pdf).



<sup>1</sup> <https://www.greenclimate.fund/project/fp197>

<sup>2</sup> [https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism\\_en](https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism_en)

## **CORRELATION BETWEEN CAPITAL STRUCTURE AND PROFITABILITY: A CASE STUDY ON CIPLA LIMITED**

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### **ABSTRACT**

*The importance of capital structure decisions cannot be overstated as they significantly influence the financial well-being and success of companies. The objective of this research paper is to investigate the correlation between the capital structure and profitability of Cipla Limited. By employing a descriptive research design, secondary data spanning five years (2014-2019) has been collected and analyzed. The study considers several key variables, including debt-to-equity ratio, net profit, capital employed, and return on equity, to assess their correlation with capital structure. The results of this research provide valuable insights into the significant influence that capital structure exerts on the profitability of Cipla Limited. Through a comprehensive analysis of the data, it becomes evident that the capital structure decisions made by the company have a direct or indirect impact on its profitability. By providing empirical evidence of the correlation between capital structure and profitability in the case of Cipla Limited, this research contributes to the existing body of knowledge on corporate finance and offers practical insights for researchers, academicians, and industry professionals alike.*

**KEYWORDS:** Capital Structure, Profitability, Correlation, Cipla Limited, Debt-to-Equity Ratio, Net Profit.

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### **Introduction**

This research paper is an attempt to understand the correlation between the capital structure and the profitability of Cipla Limited. Profit is a major reason for which businesses are operated, we can call it the fuel of business. Profit is the amount left over after deducting expenses from revenues generated during a specified period or we can say profitability is a profit earning capacity of a firm and net profit is the amount company obtained by deducting all expenses from its revenue capital structure This is one of the most important indicators of a company's viability, thus investors and lenders keep a close eye on it.

In the words of Western and Brigham "Capital structure is a permanent financing of the form represented by long-term debt, preferred stock and net worth. "Prof. J. K. Mehta's "The Element of Uncertainty introduces a fourth category of sacrifice in the productive activities of man in a dynamic world. This category is risk-taking or uncertainty-bearing. It is remunerated by Profit." Wessel and R.H. "The term capital structure is frequently used to indicate the long-term sources of funds employed in a business." The mixture or mix of debt and equity that a corporation utilizes to finance its long-term

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operations is referred to as capital structure. There is no ideal structure given anywhere. There are various theories given such as trade-off theory, pecking order theory, the Modigliani-miller theorem and many other theories which suggest, what should be the proportion of debt and equity. The capital structure of the company is affected by many factors such as business size, earnings, creditworthiness, competition, and state of the market. In addition to capital structure, several other factors have an impact on the profitability of a firm. So, the company must make a well-planned capital structure.

In the realm of corporate finance, the term "capital" refers to a company's long-term or permanent funding arrangements. Capital is typically a combination of equity and debt, each playing a pivotal role in financing the company's operations and growth. Understanding the dynamics and implications of these sources of finance is crucial for any company, as they possess distinct advantages and disadvantages.

Debt capital, one component of capital structure, encompasses a company's long-term borrowing activities. It involves acquiring funds that will be repaid over a specified period. Debt capital serves as a means for companies to raise growth capital through the utilization of loans, including options such as overdraft protection. These loans can be either short-term or long-term in nature, depending on the specific needs and circumstances of the company.

An important characteristic of debt capital is that it does not dilute the ownership position of the company's owners. Unlike equity financing, where ownership shares are diluted upon issuing new shares, debt capital allows companies to secure funds without relinquishing control. However, the repayment process, including the payment of interest until the debts are fully settled, can be time-consuming, particularly when interest rates are on the rise. This obligation to pay interest adds to the overall cost of debt capital, reflecting the compensation required by lenders for providing the funds.

Furthermore, while debt capital empowers companies to leverage lenders to invest a relatively modest amount of money with the expectation of receiving significantly larger sums, they generally anticipate receiving interest payments as compensation for their investment. The interest rate associated with debt capital represents the cost incurred by the company for utilizing borrowed funds. However, obtaining debt capital may present challenges, especially for troubled enterprises or those lacking sufficient creditworthiness, often requiring collateral as a form of security.

Equity capital is an essential element of a company's capital structure and refers to long-term funds contributed by the company's shareholders. It primarily stems from shareholder investments, emphasizing their ownership interest in the company. While the cost of debt capital is relatively straightforward, comprehending the cost of equity capital requires a more nuanced examination.

Equity funds do not necessitate a company to incur debt, thereby obviating the need for repayment. However, shareholders, driven by market performance and the stock's volatility, typically anticipate a certain level of return on their investment. To preserve shareholders' confidence and investment, companies must generate returns through healthy stock valuations and dividends that meet or exceed the shareholders' expected threshold.

The capital asset pricing model (CAPM) offers a framework for calculating the anticipated rate of return or cost of equity capital. It incorporates several factors, including the risk-free rate, the risk premium associated with the broader market, and the beta value representing the stock's volatility relative to the market.

By employing the CAPM, companies can evaluate the expected returns demanded by shareholders and determine the cost of equity capital accordingly. This calculation aids in assessing the attractiveness of investment opportunities and in making informed decisions regarding the company's capital structure.

Through the analysis, we will try to find the correlation between the capital structure and profitability of Cipla Ltd.

#### **Cipla Pharmaceutical Ltd.**

Cipla Limited, a well-known pharmaceutical company, has its shares listed on both the National Stock Exchange and the Bombay Stock Exchange. It has a rich history, tracing its origins back to 1935 when it was established in Mumbai by Khwaja Abdul Hamid as 'The Chemical Industrial and Pharmaceutical Laboratories.' On July 20th, 1984, the company changed its name to CIPLA Ltd.

Cipla is primarily engaged in the pharmaceutical sector, with a focus on developing new drug formulations and offering a diverse range of pharmaceutical products. The company manufactures and sells prescription medications, bulk medications, animal products, and pesticides. It boasts an extensive product portfolio, encompassing around 1,500 products across 65 therapeutic categories and over 50 dosage forms.

With a global presence, Cipla distributes both branded and generic medications to more than 170 countries worldwide. The company has a strong foothold in the Indian market, where its branded formulations business contributes approximately 40% of total sales. Cipla leads in various therapeutic areas, including respiratory, anti-infective, cardiac, gynecology, and gastrointestinal segments within the Indian market.

In terms of its equity capital, Cipla has a capital base of 161.3 Crore rupees. This signifies the amount of permanent funding provided by the company's shareholders to support its operations and growth initiatives.

Cipla's export business plays a significant role in its overall revenue generation. The company derives 21% of its export revenue from the United States, highlighting its presence in the highly competitive American pharmaceutical market. South Africa contributes 12% of Cipla's export revenue, while Europe accounts for 5%. The remaining 16% is derived from various other global markets.

As a leading player in the pharmaceutical industry, Cipla Limited continues to make significant contributions to healthcare by providing quality medications and investing in research and development. The company's diverse product range, global distribution network, and strong market presence position it as a key player in the global pharmaceutical landscape.

#### Literature Review

**David Durand (1952)<sup>1</sup>** gave The NET INCOME THEORY, also referred to as the Fixed Ke Theory, which states that a firm can enhance its value and lower the overall cost of capital by maximizing the use of debt in its capital structure. According to this theory, certain assumptions are made, including the belief that the cost of debt is lower than the cost of equity, and income tax considerations are disregarded. Additionally, the theory assumes that the costs of debt and equity remain constant.

**Roden and Lewellen (1995)<sup>2</sup>**, A survey was conducted on corporate capital structure decisions, focusing on 107 leveraged buyout companies in the United States. The study utilized ten year period spanning from 1981 to 1990. In their investigation of leveraged buyouts, the researchers found a positive correlation between profitability and the proportion of overall debt in the total buyout-financing package. This association was established through regression analysis.

**Wald (1999)<sup>3</sup>**, Data was collected from enterprises across approximately forty nations, utilizing the 1993 World Scope dataset. For the United States alone, the sample size included over 3,300 enterprises. In the study conducted by Wald (1999), a negative correlation between leverage and profitability was identified through regression analysis.

**Chiang, Chan, and Hui (2002)<sup>4</sup>** conducted a study in which they gathered data on 18 Hong Kong developers and 17 contractors using DataStream, an electronic financial database. Their empirical analysis, based on regression analysis, revealed a strong association between profitability and capital structure.

**Fama and French (2002)<sup>5</sup>** reached a conclusion stating that the adverse impacts of profitability on leverage align with the pecking order model. However, they also discovered a compensating reaction of leverage to fluctuations in earnings, suggesting that the effects of profitability may, to some extent, be influenced by temporary alterations in leverage rather than changes in the target.

**Lazaridis and Tryfonidis (2006)<sup>6</sup>**, between 2001 and 2004, researchers looked examined the relationship between capital structure and profitability in 131 companies registered on the Athens Stock Exchange. The findings show that while the firm size and the fixed asset to total asset ratio have a beneficial impact on a company's profitability, the cash conversion cycle and debt ratio have the opposite effect.

**Modigliani Miller Theory (1958)<sup>7</sup>** states 'A company's market value and overall cost of capital are unaffected by its capital structure.' Assumptions were perfect capital market, no transaction cost, homogenous risk class, 100 percent distribution, and no corporate taxes.

### Objective of Research

- To know the correlation between the Capital Structure and Profitability of Cipla Ltd.
- To understand the Capital Structure of Cipla Ltd.

### Hypothesis of Study

**H<sub>0</sub>:** There is no correlation between debt to equity and the net profit of the company.

**H<sub>1</sub>:** There is a correlation between debt to equity and the net profit of the company.

**H<sub>0</sub>:** There is no correlation between debt to equity and return on capital employed.

**H<sub>1</sub>:** There is a correlation between debt to equity and return on capital employed.

**H<sub>0</sub>:** There is no correlation between debt to equity and return on equity.

**H<sub>1</sub>:** There is a correlation between debt to equity and return on equity.

**H<sub>0</sub>:** There is no correlation between debt to equity and return on assets.

**H<sub>1</sub>:** There is a correlation between debt to equity and return on assets.

**H<sub>0</sub>:** There is no correlation between debt to ratio and net profit margin.

**H<sub>1</sub>:** There is a correlation between the debt-to-equity ratio and net profit margin.

### Research Methodology

This research study offers valuable insights into the correlation between capital structure and profitability, with a specific emphasis on the case of Cipla Limited. To ensure accuracy and reliability, the study utilizes data obtained from reputable secondary sources, the study incorporates relevant financial information from Cipla Limited, including its Profit & Loss Account & Balance Sheet. Additionally, financial ratios have been obtained from a reputable financial platform, specifically (<https://www.moneycontrol.com>).

The data collection spanned a period of five years, from 2014 to 2019, providing a comprehensive overview of Cipla Limited's financial performance over a significant timeframe. The research methodology employed in this study is descriptive in nature, facilitating a detailed examination of the variables and their interrelationships.

Apart from analyzing individual variables, this study conducted correlation analysis to investigate the level of association between the various factors under scrutiny. The findings from this correlation analysis offer valuable insights into the magnitude and direction of relationships among the variables, contributing to a more profound comprehension of the dynamics between capital structure and profitability. Through the utilization of a rigorous research design and trustworthy data sources, this study enriches our understanding of the link between capital structure and profitability within the specific context of Cipla Limited.

### Limitations of Study

This research study has certain limitations that should be considered when interpreting the findings:

- **Data Reliability:** The data used in this study has been collected from secondary sources. While efforts have been made to ensure the accuracy and reliability of the data, there may still be limitations inherent in secondary data sources. Factors such as data quality, completeness, and potential biases in the sources may impact the reliability of the data used for analysis.
- **Timeframe:** The data collection period for this study spans from 2015 to 2019. It is important to note that economic and market conditions, as well as the specific circumstances of Cipla Limited, may have changed since then. Therefore, the results and conclusions drawn from this study may not be directly applicable to future years or reflect the current state of the company's capital structure and profitability.
- **Generalizability:** The findings and outcomes of this research are specific to Cipla Limited and may not be generalizable to other companies in the pharmaceutical industry or any other industry. The unique characteristics, market dynamics, and business strategies of Cipla Limited may influence the correlation between profitability and capital structure differently than other companies. Therefore, caution should be exercised when applying the results of this study to conclude the capital structure and profitability of other companies.



- More Data:** The findings underscore the intricacy of the connection between capital structure and financial performance, highlighting its multifaceted nature, indicating that other factors beyond debt-to-equity ratios need to be taken into account to fully understand the drivers of profitability in the specific context of the company under study. Further research and analysis are recommended to explore additional variables that may influence the financial performance of the company

It is important to acknowledge these limitations and consider them in the context of the research findings. While this study offers valuable insights into the correlation between capital structure and profitability for Cipla Limited within the specified timeframe, additional research is needed to further investigate and understand this relationship and analysis may be necessary to validate and expand upon these findings and explore the applicability of the results to other companies or different timeframes.

### Findings and Analysis

To the formulated hypotheses, the data for this research study has been collected from reliable sources, specifically the official website of the company under investigation. By directly obtaining the data from the company's website, we can ensure its accuracy and authenticity. To facilitate a clear and comprehensive analysis, the relevant financial ratios required for this research have been summarized and presented concisely. This approach allows for a better understanding of the key financial indicators and their implications for the study's objectives.

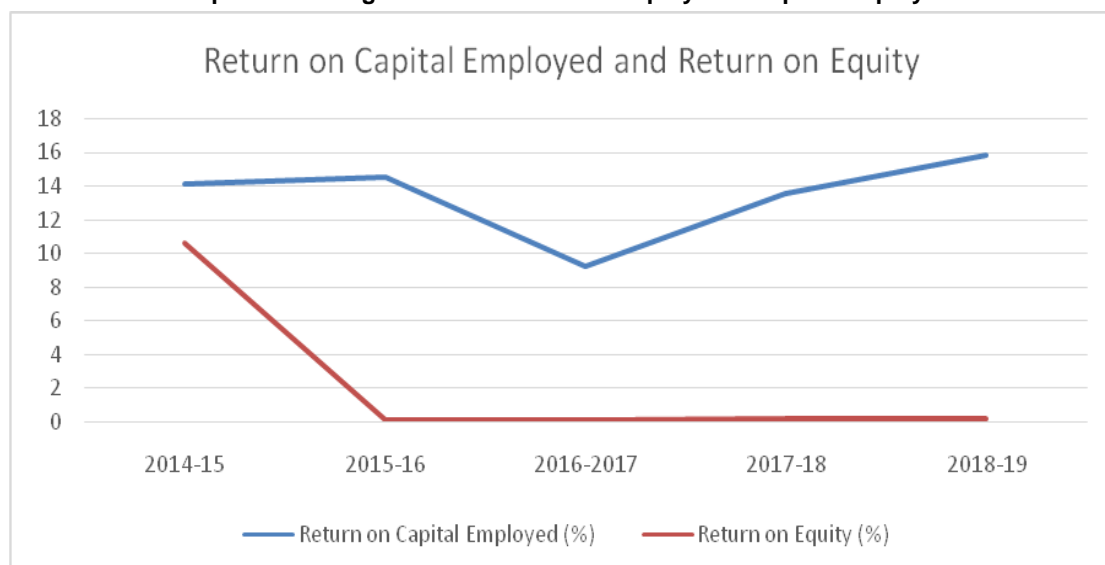
### Summarised Data

**Table 1: Showing the Summarised Data Requires for Analysis**

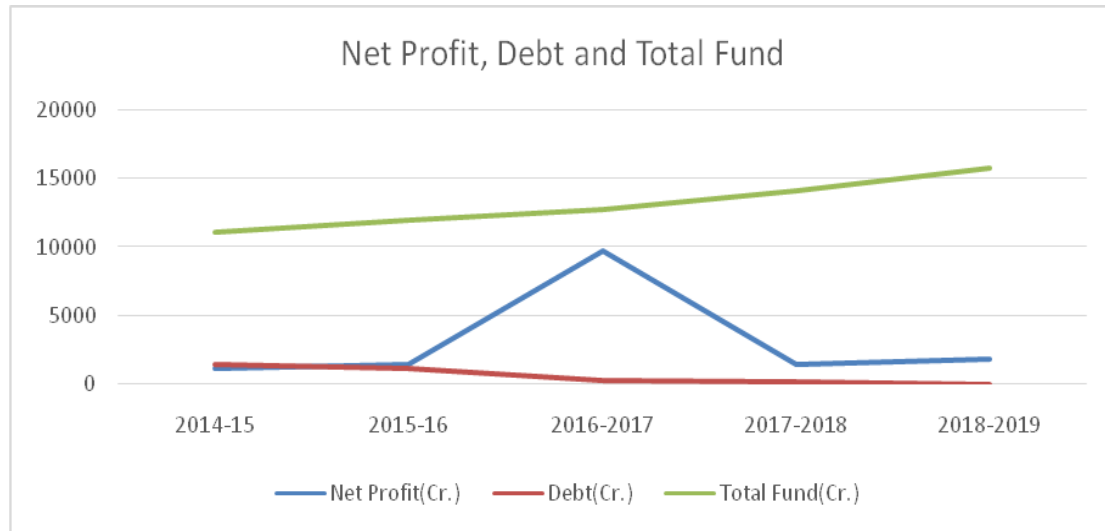
	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019
Debt to Equity(times)	0.12	0.09	0.03	0.01	0.00
Net Profit Margin (%)	1.65	12.06	9.05	12.89	15.26
Return on Capital Employed (%)	10.17	11.9	9.39	13.93	15.63
Return on Equity (%)	10.65	12.20	9.61	10.40	11.96
Return on Assets	7.77	9.59	6.24	8.59	10.25
Net Profit(Cr.)	1181.09	1462.30	974.40	1468.52	1888.41
Debt(Cr.)	1421.20	1131.81	324.33	174.43	000
Total Fund(Cr.)	11090.15	11985.88	12800.51	14113.52	15781.91

### Analysis

**Graph 1: Showing Return on Return on Equity and Capital Employed**



**Graph 2: Showing Net Profit, Debt Funds and Total Funds**



**Table 2: Regression Analysis of Debt to Equity Ratio and Net Profit Margin**

Level	Sum of Squares	Df	Mean Square	F	Significance F
Regression	2.376	1	2.376	0.402	0.570
Residual	17.705	3	5.901		
Total	20.082	4			

During the analysis, the independent variable (predictor) chosen was the Debt to Equity Ratio (X), while the dependent variable was the Net Profit Margin (Y). The study utilized a confidence level of 95% and a significance level of 5% to establish the statistical significance of the findings.

ANOVA technique is applied, under which the regression states that:

Sum of Square = 2.376

Degree of freedom = 1

Mean Square = 2.376

F test value = 0.402 at a significance level of 0.570

The residual model under the ANOVA technique:

Sum of Square = 17.705

Degree of freedom = 3

Mean Square = 5.901

Total of Sum of Square of Regression and Residual at the 4 degrees of freedom (n-1) (5-1)

F test value = 0.402

The tabulated value at the 5% level with a degree of freedom  $V_1 = 1$  and  $V_2 = 3$  is **10.13**

**Result – F test value < Tabulated Value = 0.402 < 10.13**

This shows that the null hypothesis is accepted, which means a change in the value of the Debt to Equity of the sample (Cipla Ltd.) does not affect the Net Profit Margin of the company during the period of the study.

**Table 3: Regression Analysis of Debt to Equity Ratio and Return on Assets**

Level	Sum of Squares	Df	Mean Square	F	Significance F
Regression	0.259	1	0.259	0.080	0.794
Residual	9.639	3	3.213		
Total	9.898	4			

During the analysis, the independent variable (predictor) considered was the Debt to Equity Ratio (X), while the dependent variable was the Return on Assets (Y). The study utilized a confidence level of 95% and a significance level of 5% to determine the statistical significance of the results.

ANOVA technique is applied, under which the regression states that:

Sum of Square = 0.259

Degree of freedom = 1

Mean Square = 0.259

F test value = 0.080 at a significance level of 0.794

The residual model under the ANOVA technique:

Sum of Square = 9.639

Degree of freedom = 3

Mean Square = 3.213

Total of Sum of Square of Regression and Residual at the 4 degrees of freedom (n-1) (5-1)

F test value = 0.080

The tabulated value at the 5% level with a degree of freedom  $V_1 = 1$  and  $V_2 = 3$  is **10.13**

**Result – F test value < Tabulated Value = 0.080 < 10.13**

This shows that the null hypothesis is accepted, which means a change in the value of the Debt to Equity of the sample (Cipla Ltd.) does not affect the Return on Assets of the company during the period of the study.

**Table 4: Regression Analysis of Debt to Equity Ratio and Return on Equity**

Level	Sum of Squares	Df	Mean Square	F	Significance F
Regression	0.411	1	0.411	0.095	0.777
Residual	12.973	3	4.324		
Total	13.385	4			

During the analysis, the independent variable (predictor) utilized was the Debt to Equity Ratio (X), while the dependent variable was the Return on Equity (Y). The study employed a confidence level of 95% and a significance level of 5% to evaluate the statistical significance of the findings.

ANOVA technique is applied, under which the regression states that:

Sum of Square = 0.411

Degree of freedom = 1

Mean Square = 0.411

F test value = 0.095 at a significance level of 0.777

The residual model under the ANOVA technique:

Sum of Square = 12.973

Degree of freedom = 3

Mean Square = 4.324

Total of Sum of Square of Regression and Residual at the 4 degrees of freedom (n-1) (5-1)

F test value = 0.095

The tabulated value at the 5% level with a degree of freedom  $V_1 = 1$  and  $V_2 = 3$  is 10.13

**Result – F test value < Tabulated Value = 0.095 < 10.13**

This shows that the null hypothesis is accepted, which means a change in the value of the Debt to Equity of the sample (Cipla Ltd.) does not affect the Return on Equity of the company during the period of the study.

**Table 5: Regression Analysis of Debt to Equity Ratio and Return on Capital Employed**

Level	Sum of Squares	Df	Mean Square	F	Significance F
Regression	10.422	1	10.422	1.901	0.261
Residual	16.442	3	5.480		
Total	26.864	4			

In the analysis, the Debt to Equity Ratio (X) is taken as an independent variable (Predictor) and the Return on Capital Employed (Y) is taken as a dependent variable. Confidence Level is taken at 95% and 5% Significance Level.

ANOVA technique is applied, under which the regression states that:

Sum of Square = 10.422

Degree of freedom = 1

Mean Square = 10.422

F test value = 1.901 at a significance level of 0.261

The residual model under the ANOVA technique:

The sum of Square =

Degree of freedom = 3

Mean Square = 16.442

Total of Sum of Square of Regression and Residual at the 4 degrees of freedom (n-1) (5-1)

F test value = 1.901

The tabulated value at the 5% level with a degree of freedom  $V_1 = 1$  and  $V_2 = 3$  is 10.13

**Result – F test value < Tabulated Value = 1.901 < 10.13**

This shows that the null hypothesis is accepted, which means a change in the value of the Debt to Equity of the sample (Cipla Ltd.) does not affect the Return on Capital Employed by the company during the period of the study.

**Table 6: Regression Analysis of Debt to Equity Ratio and Net Profit**

Level	Sum of Squares	Df	Mean Square	F	Significance F
Regression	90095.76	1	90095.76	0.700	0.464
Residual	385954.98	3	128651.3		
Total	476049.7	4			

In the analysis, the Debt to Equity Ratio (X) is taken as an independent variable (Predictor) and Net Profit (Y) is taken as a dependent variable. Confidence Level is taken at 95% and 5% Significance Level.

ANOVA technique is applied, under which the regression states that:

Sum of Square = 90095.76

Degree of freedom = 1

Mean Square = 90095.76

F test value = 0.700 at a significance level of 0.464

The residual model under the ANOVA technique:

Sum of Square = 385954.98

Degree of freedom = 3

Mean Square = 128651.3

Total of Sum of Square of Regression and Residual at the 4 degrees of freedom (n-1) (5-1)

F test value = 0.700

The tabulated value at the 5% level with a degree of freedom  $V_1 = 1$  and  $V_2 = 3$  is 10.13

**Result – F test value < Tabulated Value = 0.700 < 10.13**

This shows that the null hypothesis is accepted, which means a change in the value of the Debt to Equity of the sample (Cipla Ltd.) does not affect the Net Profit of the company during the period of the study.

The hypotheses examined in this research study focused on exploring the correlation between various measures of debt to equity and different financial performance indicators of the company. The null hypothesis (H<sub>0</sub>) proposed that there would be no significant correlation between the debt-to-equity ratios and the net profit, return on capital employed, and return on equity of the company.

To test these hypotheses, ANOVA F Test is applied between the debt-to-equity ratios and the financial performance indicators were calculated. The p-values were then calculated at a significance level of 5% ( $p < .05$ ). The p-value represents the likelihood of observing the obtained correlation coefficient, or a value even more extreme, assuming that the null hypothesis is accurate.

Upon analyzing the results, it was found that all the f-values obtained were less than the table value of F, indicating no statistical significance. This means that the null hypotheses were accepted, suggesting that there is no significant correlation between the debt-to-equity ratios and the net profit, return on capital employed, and return on equity.

Based on these findings, it is found that the debt-to-equity ratios do not have a significant impact on the company's financial performance indicators. Other factors or variables not considered in this study might play a more prominent role in determining the net profit, return on equity (ROE) and return on capital employed (ROCE) of the company.

### **Conclusion**

To summarize, this research paper has illuminated the intricate correlation between a company's capital structure and its profitability. The findings suggest a negative relationship between debt-equity and metrics such as Net Profit, Net Profit Margin and Return on Capital Employed, Return on Assets, and Return on Equity. However, it is worth noting that the impact is not substantial. This implies that factors other than capital structure also hold a significant influence in determining a company's profitability.

Identifying an ideal capital structure is a challenging task, as it depends on various factors unique to each company. The optimal capital structure should be tailored to the specific characteristics, risk profile, and growth opportunities of the company. It is crucial for companies to carefully consider and combine different financing sources to establish a capital structure that aligns with their strategic goals and maximizes profitability.

While this study provides valuable contributions in terms of insights into the correlation between capital structure and profitability, it is important to recognize that the findings are specific to the case of Cipla Limited. Generalizing these results to other companies or industries should be done with caution, as the dynamics may differ based on various contextual factors.

Future research endeavors should continue to explore the interplay between capital structure and profitability, incorporating a broader range of variables and considering the evolving market conditions. By deepening our understanding of this relationship, companies can make informed financial decisions and strive to achieve sustainable profitability in an ever-changing business environment.

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## ARTIFICIAL INTELLIGENCE IN SURGICAL INSTRUMENTS

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### ABSTRACT

*Artificial intelligence is the simulation of human intelligence processes by machines, especially computer systems. Specific applications of AI include expert systems, natural language processing, speech recognition and machine vision. John McCarthy is one of the “founding fathers” of artificial intelligence, together with Alan Turing, Marvin Minsky, Allen Newell, and Herbert A. Simon. The amount of data that is generated, by both humans and machines, far outpaces humans’ ability to absorb, interpret, and make complex decisions based on that data. Artificial intelligence forms the basis for all computer learning and is the future of all complex decision making. The hype around AI has accelerated, vendors have been scrambling to promote how their products and services use it. Often we refer to as AI is simply a component of the technology, such as machine learning. AI requires a foundation of specialized hardware and software for writing and training machine learning algorithms. No single programming language is synonymous with AI, but Python, R, Java, C++ and Julia have features popular with AI developers.*

**KEYWORDS:** *Artificial Intelligence, Surgical Instruments, Computer Learning, Python, Java.*

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### Introduction

In general, AI systems work by ingesting large amounts of labeled training data, analyzing the data for correlations and patterns, and using these patterns to make predictions about future states. In this way, a chatbot that is fed examples of text can learn to generate lifelike exchanges with people, or an image recognition tool can learn to identify and describe objects in images by reviewing millions of examples. New, rapidly improving generative AI techniques can create realistic text, images, music and other media.

AI programming focuses on cognitive skills that include the following:

- **Learning.** This aspect of AI programming focuses on acquiring data and creating rules for how to turn it into actionable information. The rules, which are called algorithms, provide computing devices with step-by-step instructions for how to complete a specific task.
- **Reasoning.** This aspect of AI programming focuses on choosing the right algorithm to reach a desired outcome.
- **Self-correction:** This aspect of AI programming is designed to continually fine-tune algorithms and ensure they provide the most accurate results possible.

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- **Creativity:** This aspect of AI uses neural networks, rules-based systems, statistical methods and other AI techniques to generate new images, new text, new music and new ideas.

Advantage of artificial Intelligence:

Reduction in Human Error.

Zero Risk Error

24x7 Availability

Digital Assistance.

New In Assistance

Unbiased Decisions.

Perform Repetitive Jobs.

Daily Applications.

### Applications of Artificial Intelligence



### Artificial Intelligence in Biomedical Technique

Artificial Intelligence (AI) is gradually changing the practice of surgery with the advanced technological development of imaging, navigation and robotic Intervention. In this article, the recent successful and influential applications of AI in surgery are reviewed from pre-operative planning and intra-operative guidance to the integration of surgical robots. We end with summarizing the Current state, emerging trends and major challenges in the future developments of AI in surgery.

Advances in surgery have made a significant impact on the management of both acute and chronic diseases, prolonging life and continuously extending the boundary of survival. These advances are underpinned by continuing technological developments in diagnosis, imaging, and surgical instrumentation. Complex surgical navigation and planning are made possible through the use of both pre- and intra-operative imaging techniques such as Ultrasound, Computed Tomography (CT), and Magnetic Resonance Imaging surgical trauma is reduced through Minimally Invasive Surgery (MIS), now increasingly combined with robotic assistance ; post-operative care is also improved by sophisticated wearable and implantable sensors for supporting early discharge after surgery, enhancing the recovery of patients and early detection of post-surgical complications.



The introduction of AI in surgery is more recent and it has a strong root in imaging and navigation, With early techniques focused on feature detection and computer assisted intervention for both pre-operative planning and intra-operative guidance. Over the years, supervised algorithms such as active shape models, atlas Based methods and statistical classifiers have been developed .With recent successes of AlexNet [6], deep learning methods, especially Deep Convolutional Neural Network (DCNN) where multiple convolutional layers are Cascaded, have enabled automatically learned data-driven descriptors, rather than ad hoc hand-crafted features, to be used for image understanding with Improved robustness and generalizability.

In this article, we review the applications of AI in pre-operative planning, intra-operative guidance, as well as its integrated use in surgical robotics. Popular AI techniques including an overview of their requirements, challenges and subareas in surgery

### **AI for Pre-operative Planning**

Pre-operative planning where surgeons plan the surgical procedure from existing medical records and imaging is essential for the success of a surgery. Among existing imaging modalities, X-ray, CT, ultrasound and MRI are the most common ones used in practice. Routine tasks based on medical imaging include anatomical classification, detection, segmentation, and registration.

Include anatomical classification, detection, segmentation, and registration.

- **Classification**

Classification outputs the diagnostic value of the input which is a single or a set of medical images or volumes of organs or lesions. In addition to traditional machine learning and image analysis techniques, deep learning based methods for pre-operative planning are on the rise For the latter, the network architecture for classification is composed of convolutional layers for extracting information from the input images or volumes and fully connected layers for regressing the diagnostic value. classification lung, bladder and breast cancer types demonstrate that deep learning can recognize intracranial haemorrhage, calvarial fracture, midline shift and mass effect through testing a set of deep learning algorithms .

- **Detection**


Detection provides the spatial localization of regions of interest, often in the form of bounding boxes or landmarks, additionally to image- or region Level classification. Similarly, deep learning based approaches have shown Promises. Compared to traditional algorithms which are task-specific due to hand-crafted feature extractors, DCNNs for detection usually consist of Convolutional layers for feature extraction and regression layers for regressing the bounding box properties. For detecting prostate cancer from 4D Positron-Emission Tomography(PET) images, a deeply stacked convolutional autoencoder was trained to Extract the statistical and kinetic biological features .

- **Segmentation**

Segmentation can be treated as a pixel- or voxel-level image classification Problem. Due to the limitation of computational resources, early works on Deep learning for segmentation often adopted a sliding window-based system. Specifically, each image or volume was divided into small windows, CNNs were trained to predict the target label at the central location of the window. Image- or voxel-wise segmentation can be achieved by running the CNN classifier over densely sampled image windows. One of the well-known networks that falls into this category is Deepmedic, which had shown good performance for multi-modal brain tumour segmentation from MRI. However, the sliding window-based system is inefficient as the network activations of overlapping regions were computed repeatedly. More recently, it was replaced by Fully Convolutional Networks (FCNs).

- **Registration**

Registration is the spatial alignment between two medical images, volumes or modalities, which is particularly important for both pre- and intraoperative planning. Traditional algorithms usually iteratively calculate parametric transformation, i.e., elastic, fluid or B-spline model to minimize A given metric, i.e., mean square error, normalized cross correlation, or mutual information, between the two medical images, volumes or modalities. Recently, deep regression models have been used to replace the traditional time consuming and optimization based registration algorithm. Example deep learning based approaches include VoxelMorph based on CNN structures for maximizing the standard image matching objective functions by leveraging auxiliary segmentation to map an input image of intra-operative guidance to provide enhanced .

	<b>Preoperative planning</b>	<b>Intraoperative guidance</b>
	<ul style="list-style-type: none"> <li>• More public available large-scale datasets for training DCNNs</li> <li>• Federated learning, meta-learning and explainable AI</li> <li>• Early detection and diagnosis based on multimodal information</li> </ul>	<ul style="list-style-type: none"> <li>• Shift from static image displays to show dynamic organ function</li> <li>• Advanced AR and VR technologies for surgical training and teaching</li> <li>• Remote surgical cooperation between multidisciplinary teams</li> </ul>
	<b>Surgical robotic</b>	<b>Ethical and legal issues</b>
	<ul style="list-style-type: none"> <li>• More versatile, lighter, and cheaper robots</li> <li>• Increased level of robotic autonomy with LfD and RL</li> <li>• Nanorobot for diagnosis and drug delivery</li> </ul>	<ul style="list-style-type: none"> <li>• Protect the privacy of patients' data</li> <li>• Cybercrime—supportive system when failures happen in AI</li> <li>• Ethics—trust between patients and AI systems</li> </ul>

### AI for Intraoperative Surgery

Computer-aided intra-operative guidance has always been a corner-stone of MIS. Learning strategies have been extensively integrated into the development of intra-operative guidance to provide enhanced visualization and Localization in surgery. For the purpose of intra-operative guidance, recent Work can be divided into four main aspects: intra-operative shape instantiation, endoscopic navigation, tissue tracking and Augmented Reality (AR).

- **D Shape Instantiation**

For intra-operative 3D reconstruction, 3D volumes can be scanned with MRI, CT or ultrasound. In practice, this process (3D/4D) can be time-consuming or with a low resolution. Real-time 3D shape instantiation which Instantiates the intra-operative 3D shape from a single or limited 2D images Is an emerging area of research in intra-operative guidance. For example, a 3D prostate shape was instantiated from multiple non-Parallel 2D ultrasound images with a radial basis function .

- **Endoscopic Navigation**

In surgery, there is an increasing trend towards intra-luminal procedures and endoscopic surgery driven by early detection and intervention. Navigation techniques have been investigated to guide the manoeuvre of endoscopes Towards target locations. To this end, learning-based depth estimation, visual odometry and Simultaneous Localization and Mapping (SLAM) have Been tailored for camera localization and environment mapping with the use of endoscopic images.

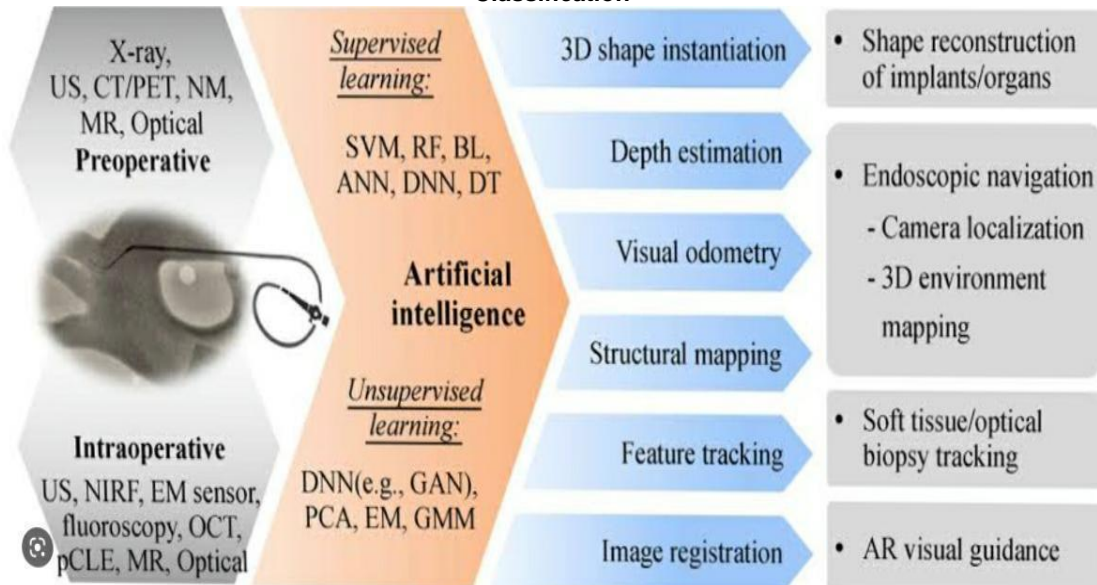
- **Tissue Feature Tracking**

Learning strategies have also been applied to soft tissue tracking in MIS. introduced an online learning framework that updates the feature tracker over time by selecting correct features using decision tree classification. Proposed a detection approach that incorporates structured Support Vector Machine (SVM) and online random forest for Re-targeting a pre-selected optical biopsy region on soft tissue surface of GItract. Adopted a statistical appearance model to differentiate the organ from the background in their region-based 3D tracking algorithm.

- **Augmented Reality**

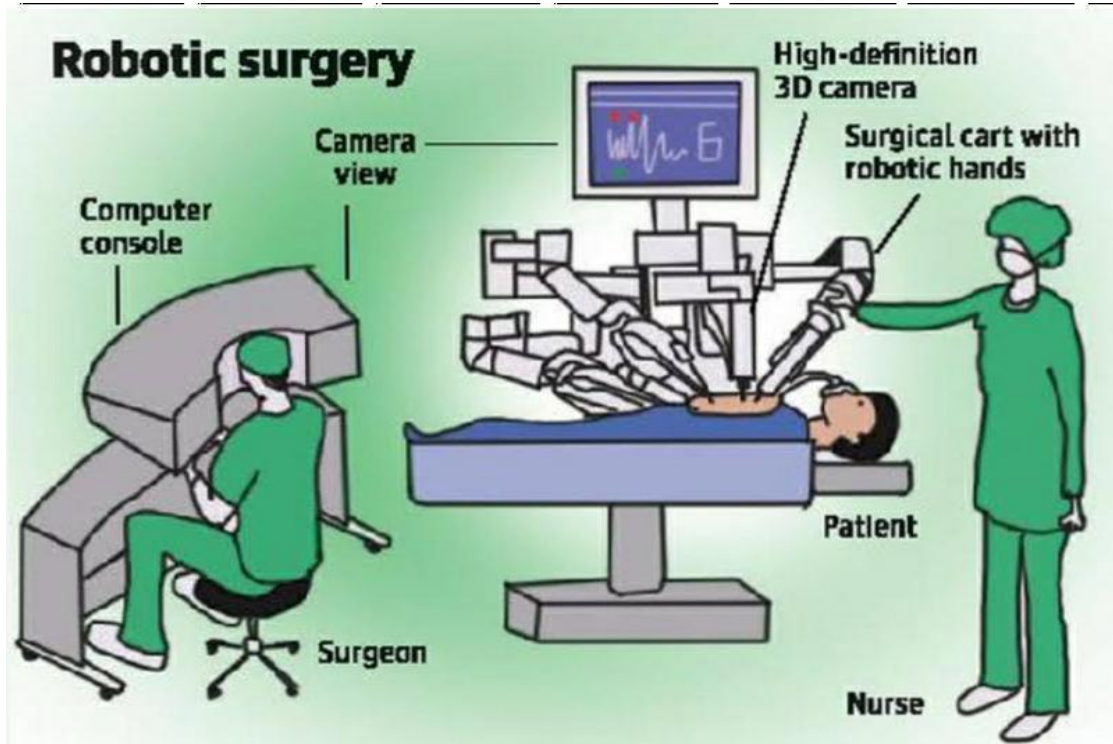
AR improves surgeons' intra-operative vision through a prevision of a Semi-transparent overlay of pre-operative imaging on the area of interest. used a projector to project the AR overlay for oral and maxillofacial surgery. The 3D contour matching was used to calculate the Transformation between the virtual image and real teeth. Instead of using, exploited Hololens, a head-mounted AR device, to Demonstrate the 3D vascular model on the lower limb of patient. While one of the most challenging tasks is to project the overlay on markerless deformable organs, introduced an automatic registration framework for AR navigation, of which the Iterative Closet Point (ICP) and RANSAC were applied for 3D deformable tissue reconstruction.

**Fig. 2: Intra-Operative Surgery Classification**



**AI in Robotic Surgery**

With the development of AI techniques, surgical robots can achieve superhuman performance during MIS . The objective of AI is to boost The capability of surgical robotic systems in perceiving the complex in vivo Environment, conducting decision making, and performing the desired tasks with increased precision, safety, and efficiency.



## Conclusion

In conclusion, we still have a long way to go to replicate and match the levels of intelligence that we see in surgeons and AIs that can learn complex tasks on their own and with a minimum of initial training data will prove critical for next-generation systems. Here we quote some of the questions raised by Yang et al. in our review on Medical Robotics – Regulatory, Ethical, and Legal Considerations for Increasing Levels of Autonomy.

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## A STUDY TO ANALYZE ECONOMIC POSITION OF ASPIRING WOMEN ENTREPRENEURS IN AMRAVATI CITY

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### ABSTRACT

*This research paper is about the women entrepreneurs who has become the buzz in the market. Today, women entrepreneurs are plying a significant role in pushing up the economy of many countries. In the whole world and in any field, women have established themselves from last century. And their participation is increasing by every single day. Women have become more competitive by entering into the world of entrepreneurship. This paper talks about the economic position of aspiring women entrepreneurs in Amravati city. This paper is based on primary data collected through a questionnaire.*

**KEYWORDS:** *Women Entrepreneurs, Aspiring, Primary Data.*

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### Introduction

Entrepreneurship involves the creation of something valuable, requiring dedication, time, and effort, while also taking on associated risks and rewards. Women entrepreneurs are individuals who undertake the task of establishing business enterprises specifically for women. In today's fast-paced world, women entrepreneurs play a vital role in driving global economic development and social progress. As education among women has progressed, it has led to increased opportunities for women in terms of employment.

The term "entrepreneurship" has its roots in the French words "Entree," meaning "to enter," and "Prendre," meaning "to take." In a broad sense, it refers to individuals who embark on new projects or explore new opportunities. Women entrepreneurs can be described as women or groups of women who initiate, organize, and manage a business venture. In India, the government has defined women entrepreneurs based on their involvement in the equity and employment aspects of a business. Specifically, a woman-led enterprise is characterized as an enterprise owned and controlled by a woman, with a minimum financial stake of 51% of the capital, and providing at least 51% of the employment opportunities to women. A woman entrepreneur is a confident, innovative, and creative woman who strives for economic independence either individually or through collaboration. She generates employment opportunities for others by initiating, establishing, and operating her enterprise while balancing her personal, family, and social life.

"Women Entrepreneurship" refers to the act of women owning and creating businesses, which not only empowers them economically but also enhances their status in society. As a result, women entrepreneurs have had a significant impact across various sectors, accounting for more than 25% of all types of businesses. With the implementation of privatization, liberalization, and globalization policies,

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women began to respond to the changing business landscape, and their involvement in entrepreneurial endeavors became noticeable. The advent of computerization also played a role in facilitating women's entry into the business world. Initially, women predominantly engaged in home-based businesses, such as producing homemade products like pickles and papads. However, over time, their focus shifted towards small and medium enterprises encompassing manufacturing, trading, and the service sector.

### Literature Review

**Amatya (2003)** wrote a thesis titled, "Socio-Economic Status of Women: A Case Study of Ekhachhen, Lalitpur". The main objective of this research was to study the socio-economic profile of respondents/ women entrepreneurs. In addition to that, to analyze the societal participation of women entrepreneurs for instance participation in household activities, community and in politics. In contrast to most of the studies, here women entrepreneurs were not highly educated. And very few women entrepreneurs were highly educated and work at prestigious organisation. It was also found that there exists belief in spiritual power. Additionally, it was found that the work load of women was more as compared to their male counterpart.

**S. Mathivanan & M. Selvakumar (2008)** wrote an article entitled, "A study on Socio-Economic Background and Status of Women Entrepreneurs in Small Scale Industries". They mentioned that women must be given freedom to choose the business they wish to undertake. Women entrepreneurs had an immense role to play in the development of the country. As they make progress the nation will flourish. Hence the authors conclude that socio-economic background play a significant role in the success of women entrepreneurs.

**Duflo (2011)** worked on women's empowerment and economic development. There is a close relation between women empowerment and economic development. Author stated that development itself will bring empowerment, which will then result in bringing about the change in decision making process. All of this will have a direct impact on development of a country. Women empowerment leads to improvement in case of children's welfare which includes health and nutrition but at the cost of education. When it comes to quality between men and women, it can only be achieved by continuing policy actions that favours a little more to women than men possibly for a period of time.

**Chopra (2013)** researched on title, "A Social Perception Towards Women Entrepreneurs in India – From Perception to Reality". The research has stated that there is strong change in the perception in society towards women entrepreneurs in Indian society. However, the research states that this change is not evident in most of the cases. In addition to that, Indian society is in transition phase where change in people's perception will be observed in their action over a period of time. The time taken for this process can be reduced by the catalytic action of NGOs, educational organisation and government.

**Hujuri (2016)** studied the socio-economic status of women entrepreneurs in Assam. She has stated the importance of women in the field of entrepreneurship and its benefits on the economy. She found out that mostly women belonging to Hindu religion opt for entrepreneurship. Maximum women have completed their graduation and then started their enterprise according to their study.

**Jeni et al. (2021)** wrote a research paper entitled, "The Economic and Socio-Cultural Factors Affecting Performance of Women Entrepreneurs in Bangladesh: An Exploratory Study on Cumilla City". In the study, authors have concluded that both the factors economic and socio-culture factors are different from each other and had different impact on the performance of women entrepreneurs. Also, it was stated that these factors had a significant impact on the performance of women entrepreneurs. Authors suggested that government shall come forward to help these entrepreneurs in different ways. The role of government in motivating and promoting entrepreneurship is extremely crucial.

### Objective of the Study

- To assess the economic position of women entrepreneurs of Amravati city.
- To check the impact of economic position on standard of living of women entrepreneurs.

### Hypothesis of the Study

**H<sub>01</sub>:** Economic position of women entrepreneurs in Amravati Division is not good.

**H<sub>A1</sub>:** Economic position of women entrepreneurs in Amravati Division is good.

**H<sub>02</sub>:** There is no impact of economic position on standard of living of women entrepreneurs.

**H<sub>A2</sub>:** There is an impact of economic position on standard of living of women entrepreneurs.

### Research Methodology

The present study has used Descriptive research design. It combines observation, interview and survey. It is based on primary data. The data is collected from 100 women entrepreneurs through a structured questionnaire prepared using 5 point likert scale. After that, this data is analyzed to draw conclusion using appropriate tools and techniques.

### Data Analysis and Interpretation

**H<sub>01</sub>:** Economic position of women entrepreneurs in Amravati Division is not good.

**H<sub>A1</sub>:** Economic position of women entrepreneurs in Amravati Division is good.

To test this hypothesis One sample T-test is used. The following table shows Descriptive statistics and one sample T-test output.

### Descriptive Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Economic Position	100	3.6343	.56938	.05694

### One-Sample T-test

	Test Value = 3.63					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Economic Position	.075	99	.940	.00429	-.1087	.1173

The above table shows analysis regarding the economic position of women entrepreneurs. It shows t-value (0.75) > t-critical value (1.96) which means the null hypothesis is rejected and alternate hypothesis is accepted. Also, p-value (.940) > 0.05 it can be concluded that the results obtained are statistically insignificant.

**H<sub>02</sub>:** There is no impact of economic position on standard of living of women entrepreneurs.

**H<sub>A2</sub>:** There is an impact of economic position on standard of living of women entrepreneurs.

To test the impact of economic position of women entrepreneurs on their standard of living one way ANOVA is used.

### ANOVA

Economic position					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11.391	18	.633	1.192	.287
Within Groups	42.992	81	.531		
Total	54.383	99			

The above table shows p-value .287 > 0.05 hence, we can conclude that no significant impact of economic position on the standard of living of women entrepreneurs.

### Conclusion

The study has analyzed economic position of women entrepreneurs along with their standard of living. The study has taken into consideration 7 factors individually for both the variables from the available literature. These factors were analyzed by using one way ANOVA and one sample t-test. With the help of these test, it was found economic position of women entrepreneurs is good in the selected sample area. In addition to that, economic position of women entrepreneurs have no impact on their standard of living. Women entrepreneurs have become an integral part of the growth and prosperity of many developing countries. Women have started contributing to the economy which has proved to be beneficial for both the country and for themselves.

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## FINANCIAL LITERACY AMONG PEOPLE OF RURAL AREA IN JAIPUR DISTRICT

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### ABSTRACT

*Financial literacy which includes awareness and knowledge to decide on savings, borrowings, and some was planning for future income. This concept has become one of the top priorities for most of the world today as it is directly proportional to the economic growth of a country. This study analyzed main differences in financial literacy across different villages of Jaipur district in Rajasthan. The purpose to understand Importance of financial Literacy among people of rural areas. A questionnaire was designed including some financial knowledge seeking questions. Efforts were made to create awareness among different income, age, gender, groups about the services provided by the bank and the government. This article aims to evaluate the extent of financial literacy in Jaipur and look at the current status. The aim of this article is to analyze the banking services, government schemes running in rural areas. The article also discusses how it contributes to the enhancement of financial literacy innovation including new methods, techniques and technologies with an emphasis on this.*

**KEYWORDS:** *Financial Literacy, Innovation, Techniques and Technologies.*

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### Introduction

The country of India is divided on the basis of caste, religion and geography. There is economic and social diversity here. The concept of economic reform without social reform is useless. This is almost a parallel process. About 68.8% people in the country live in rural areas. There is lack of education, health, social security and basic facilities. Governments have been working on these through various schemes so that there is economic and social improvement in the life of a person. The banking sector has also contributed in making these services accessible to the masses by the government. Under which every rural person was being connected and is. For which it is very important for the villagers to have an understanding of financial literacy so that they can strength their economic and social status.

Financial literacy is the education and understanding of knowing how money is made, spent, and saved, as well as the skills and ability to use financial resources to make decisions. These decisions include how to generate, invest, spend, and save money. The lack of knowledge on financial literacy may lead to making poor financial decisions that can have serious impacts on your financial well-being. Hence, it is high time we understood our finances well and did better financial planning and investments for a smooth financial life.

Various schemes of the government are being run to provide service among the rural public, but due to lack of financial literacy, it is not able to reach them, the banking sector has a big contribution in reaching these schemes to the public, reaching It has not been possible yet that the banking service is not accessible to the public or the public is not able to reach the bank, it is a research topic, which has been highlighted by this paper.

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Under the research, 3 villages were selected, whose population is about 3000, their water level has gone down a lot and they have the maximum number of small and marginal farmers. Which come within 100 km radius from Jaipur city, 40 km radius from college, about 20 km radius from Bada Gaon (Via). At least one branch of the bank has been functioning in these large villages (via) for many years. In sample size 150, 50 samples were taken from each village. Under which answers to 33 questions were sought. On the basis of these questions, some decision was reached which has been done in this paper.

#### About Rajasthan

Rajasthan is historical and one of the most beautiful states in the country. The pink city of Jaipur is the capital of Rajasthan. The Population of Rajasthan according to the 2011 census stands at about 68 million, making it the 8th most populated state in India. The state makes up about 5.6% of the country's population. The density of population per sq. Km. is about 200 and a lot below the national average. The state has a growth rate of about 21% percent which is the 11th highest growth rate in the country.

Population	1,210,193,422
Urban Population	17080776
Percent to total state population	24.9%
Rural Population	51540236
Percent to total state population	75.1%
Area (km <sup>2</sup> )	342239
Density (/km <sup>2</sup> )	201
Sex Ratio	926
Literacy Rate	67.06%

#### About Jaipur

Jaipur is the capital city of the Rajasthan, India. Jaipur have a semiarid climate with relatively high temperatures throughout the year. Enclosed by Aravalli Hills from three sides, It is rich in panoramic beauty that attracts tourists from all over the world. These hills also guard Jaipur from the rough and dry climate of the desert region. It is located 268 km (167 miles) from the national capital New Delhi. Jaipur is located on National highway No.48 connecting Delhi and Mumbai. National Highway 52 links Jaipur with Kota and National Highway 21 links Jaipur with Agra.

Description	Rural	Urban
Population (%)	47.60 %	52.40 %
Total Population	3,154,331	3,471,847
Male Population	1,642,924	1,825,583
Female Population	1,511,407	1,646,264
Sex Ratio	920	902
Child Sex Ratio (0-6)	869	853
Child Population (0-6)	481,315	448,611
Male Child(0-6)	257,532	242,087
Female Child(0-6)	223,783	206,524
Child Percentage (0-6)	15.26 %	12.92 %
Male Child Percentage	15.68 %	13.26 %
Female Child Percentage	14.81 %	12.55 %
Literates	1,807,604	2,493,361
Male Literates	1,142,333	1,412,460
Female Literates	665,271	1,080,901
Average Literacy	67.62 %	82.47 %
Male Literacy	82.46 %	89.20 %
Female Literacy	51.67 %	75.08 %

#### Objectives of the Study

- To study present financial literacy awareness in rural areas
- To study importance of financial literacy in rural people.
- To study awareness about banking services.

- To explain and find out the issues and challenges of the factors responsible small and marginal farmers in selected study area.
- The government policies and scheme are improving living standards of small farmers.

#### Target Group

Financial Literacy Project was targeted the villagers. Target group has a low income and that too unpredictable and this group is vulnerable to poverty due to the scarcity of financial sources.

#### Target Area

For providing financial literacy to the villagers, three areas were included:

- Luniawas village (via-Badhal, jila-jaipur)
- Lalasar village (via-Badhal, jila-jaipur)
- Khojawala village (via- Ghasipura, jila-Jaipur)

#### Survey for financial literacy among people of rural area in rajasthan

##### (Questionnaire)

1. Name \_\_\_\_\_
2. Age(year)  
(1) 13-19 (2) 20-35 (3) 35-60 (4) 60+
3. Sex  
(1) Male (2) Female
4. Education  
(1) Illiterate (2) Primary (I-V std pass) (3) Middle (VIIIstd pass) (4) SSC (X std pass)  
(5) HSC (XII std pass) (6) Graduate (7) Post Graduate
5. Category  
(1) Student (2) Employed (3) Unemployed
6. Occupation  
(1) Trader (2) Farmer (3) Professional  
(4) House wife/House maker
7. Total annual income & expected.  
(1) Below 30,000 (2) 30,001-60,000  
(3) 60,001-1, 00,000 (4) 1, 00,001-3, 00,000  
(5) 3, 00,001 & above
8. Annual saving  
\_\_\_\_\_
9. Forms of saving  
(1) Cash (2) Bank  
(3) Real goods (4) Friends & Relatives
10. In which type of bank do you deposit your money?  
(1) Corporative bank (2) Commercial bank  
(3) Regional rural bank (4) Indigenous bank  
(Local money lenders) (Societies)
11. Which type of bank scheme do you adopt to deposit your money?  
(1) Saving deposit scheme (2) Fix / Terms deposit scheme (3) Pigmy deposit scheme  
(4) Recurring deposit scheme
12. What do you expect by depositing in the bank?  
(1) Interest (2) Liquidity of fund  
(3) Safety of money (4) Growth in deposits

13. Who has guided you to deposit money in a Bank?  
(1) Advertisement (2) Friends & relative  
(3) Neighbors (4) Any Other
14. How many bank branches are there in your area? Please name the bank
- 
15. What important facilities you get from the bank?  
(1) Money Deposit (2) Loan & advances  
(3) Transfer of money (4) Locker Facilities
16. Do you know how to use ATM?  
(1) Yes (2) No
17. Do you use 'toll free customer services' provided by various bank?  
(1) Yes (2) No
18. Do you know about RBI?  
(1) Yes (2) No
19. Out of the following services which of them you used  
(1) Deposit money (2) ATM facility  
(3) Loan facility (4) Demand draft facility  
(5) Locker facility (6) Term deposit  
(7) Kisan credit card (8) Jan Dhan account  
(9) Chiranjivi card (10) Jan Aadhar card
20. From where do you borrow money?  
(1) Bank (2) Local money lenders  
(3) Friends & relatives (4) Chit fund/society
21. Are you aware about the deposit insurance of your deposit in the bank?  
(1) Yes (2) No
22. Which of the form of the borrowing are known to you?  
(1) Over draft facility (2) Advances  
(3) Loans
23. Do you know the use of NEFT/RTGS for transferring money from one place to another through bank?  
(1) Yes (2) No
24. Are you satisfied with the facility provide by bank?  
(1) Yes (2) No
25. What type of problems do you face while dealing with the bank?  
(1) Unsatisfactory customer service  
(2) Dishonored Cheque  
(3) Loss of ATM  
(4) Blocking ATM in the machine  
(5) Debiting the a/c while getting money from the ATM machine  
(6) Rude behavior of the bank employees  
(7) Lack of proper guidance  
(8) Bank branch unapproachable
26. Do you know the difference between a real currency note and a fake currency note?  
(1) Yes (2) No

27. Are you aware of the various charges & rates of the interest of the bank?  
(1) Yes (2) No
28. How frequently do you visit the bank?  
(1) Daily (2) Bi weekly  
(3) Weekly (4) Monthly  
(5) Quarterly
29. for opening a saving bank a/c which of the following is produced by you  
(1) Address proof (2) Id card  
(3) References (4) Photograph
30. Do you know about the Ombudsman (Lokpal) for grievance handing process in the bank?  
(1) Yes (2) No
31. Are you getting the following facilities for operating you a/c in the bank?  
(1) Cheque book facility (2) Passbook facility  
(3) Statement of a/c
32. Are you aware of your right as a customer of a bank as in Consumer Protection Act 2013?  
(1)Yes (2) No
33. Do you use Mobile Banking / Online Payment method?  
(1)Yes (2) No
33. As per your experience what measures would you like to suggest in order gaining more benefits from banks.

#### Summary of Answers to the Questionnaire

- Villagers have become aware towards Banking.
- Villagers have become more interested in the saving scheme in the bank for the safety of their money
- Maximum of the villagers expects safety in the Bank.
- The source of motivation for 37% villagers for using Banking services is advertisement where 23% of the villagers have been guided for Banking deposit by their friends & relative in addition to advertisement.
- Maximum villagers avail the ATM service.
- Even today most of the villagers are unaware about their Banking rights. data reveal that a sum of 88% villagers don't know about Banking ombudsman (Lokpal)while another 78% don't know about Consumer protection act 2013.
- The 'toll free customer services' number service number has never been used by 99% villagers to obtain in for.
- It was found that 94% villagers know a little bit about RBI & it's working.
- Local money lenders were found less population among villagers whereas 8% of them borrow money from friends & relatives, 34% from Bank & lastly 44% borrow money from friends as well as Bank.
- All the villagers are ensured that there money is insured in Bank.
- 69% villagers don't know about NEFT/RTGS.
- The survey shows that villagers are annoyed with distance Bank from the Bank.
- Due to having a Smartphone in most of the youth, they have more faith in mobile banking and online transactions.
- A borrower unable to truly understand the terms of a loan.

### How to Improve Financial Awareness of Rural Area

- Villager's complaint that they cannot understand the terms and conditions the Banking services because of the use of tough language for communication. So, Bank should use normal language which can be easily understood by villagers. This purpose can also be solved using non-verbal method of communication for e.g. through poster & cartoon.
- The yearly income of most of the farmer less than three Lakh. They are dependent upon agriculture and agriculture is highly dependent on the Monsoon. So, Bank should motivate the farmer for small industries and give knowledge about small industries. For this purpose bank should provide lower interest loan to these farmers by which they can improve their living standard.
- Some problems are created by poor electricity. Thus due to the electricity problem the service are not easily provided in the villagers
- Conducting workshops and training programs to rural customers regarding how do operate in internet banking.
- Youth people are using more internet banking services, than the aged and uneducated people so banks have to create awareness among those people
- Create a trust in the mind of customers towards security of online banking services.
- Banks should develop their services in villages and should install more and more ATM's.
- Bank should give the knowledge about banking services to the illiterate farmer, those who do not have any knowledge about it, by going in THANI, SCHOOL, and PANCHAYAT. The farmer should be provide with the knowledge about financial education and Banking services

### Conclusion

The financial literacy among the rural people of Jaipur district was found to be satisfactory. The educated class i.e. graduate or above graduate appeared enthusiastic about financial literacy. They looked eager to strengthen the present and future through financial literacy. Employed people showed more seriousness towards their savings in various schemes, insurance, mutual funds and long-term investments. But their number was nominal; most of them were graduates or graduates. Below was the educated, uneducated person who depended only on low savings, the reason for which the bank was not near to their village among the low income group people. They knew less about investment, they knew insurance and other services like mutual funds, Long term investment was far away from short term investment. He was aware of the bank's fixed deposit schemes but did not know about any other scheme other than this. Most of them did not use smart phone due to which they could not understand internet banking, online transactions and were away from it. These results highlight the need for consistent and sustained interventions from all stakeholders, including policy makers, to educate and improve basic financial literacy for informed financial decision-making in rural areas. There is a great need to impart adequate and timely knowledge to the people for their proper sustenance along with acquiring knowledge about how to evaluate the products and services available in the financial market. Financial knowledge is considered a necessary condition for survival, and a lack of this knowledge can have harmful consequences for both individuals and communities.

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## THE ROLE OF DIGITAL CURRENCIES IN ADVANCING A CASHLESS ECONOMY: OPPORTUNITIES AND CHALLENGES

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Pankaj Grover\*

### ABSTRACT

*Digital currencies are emerging as a new form of currency in the world, with the potential to revolutionize the way we conduct transactions. Digital currencies, such as Bitcoin, Ethereum, and others, operate on a decentralized block chain technology that enables secure, transparent, and low-cost transactions. This paper explores the role of digital currencies in advancing a cashless economy. The paper examines the history, characteristics, and benefits of digital currencies, as well as the challenges they face in achieving mainstream adoption. The paper also explores the regulatory landscape for digital currencies and their potential impact on the global financial system.*

**KEYWORDS:** *Digital Currency, Cashless Economy, Bitcoin, Ethereum, Global Financial System.*

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### Introduction

Digital currencies are a new form of currency that operates on a decentralized block chain technology. Digital currencies, such as Bitcoin, Ethereum, and others, are gaining popularity as a means of payment and store of value. They are also being used for other purposes, such as fundraising and trading. Digital currencies have the potential to revolutionize the way we conduct transactions, making them faster, cheaper, and more secure. They could also play a crucial role in advancing a cashless economy.

### History of Digital Currencies

The concept of digital currencies dates back to the early days of the internet, when people first began to envision a world where money could be transferred electronically without the need for physical cash. The first digital currencies were created in the late 1990s and early 2000s, with the most well-known being e-gold, Liberty Reserve, and WebMoney.

E-gold was one of the first digital currencies to gain widespread adoption, and it allowed users to purchase gold-backed digital currency that could be used to make purchases online. E-gold was popular with people who wanted to make anonymous online purchases, and it quickly became the go-to payment method for many illegal online activities.

Liberty Reserve was another popular digital currency that was created in the early 2000s. It was based in Costa Rica and allowed users to transfer funds anonymously between accounts. Like e-gold, Liberty Reserve was popular with people engaged in illegal activities, and it was shut down by the US government in 2013 for money laundering and other criminal activities.

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Web-Money was another digital currency that gained popularity in the early days of the internet. It was created in Russia in 1998 and allowed users to transfer funds between accounts using digital tokens. WebMoney was popular with people in Eastern Europe and Russia, and it is still in use today.

### **The Rise of Bitcoin**

The modern era of digital currencies began in 2009 with the creation of Bitcoin. Bitcoin was created by an unknown person or group of people using the pseudonym Satoshi Nakamoto. It was based on a decentralized, peer-to-peer network that allowed users to transfer funds directly between accounts without the need for a central authority.

Bitcoin quickly gained popularity among tech enthusiasts and libertarians who saw it as a way to bypass government control and create a more decentralized financial system. Its value began to rise rapidly, and by 2013, it had reached \$1,000 per coin.

Bitcoin's success inspired the creation of other digital currencies, known as altcoins. These included Litecoin, Ripple, and Ethereum, among others. Each of these digital currencies had its own unique features and value proposition, but they all shared the underlying principles of decentralization and peer-to-peer networking.

### **Characteristics of Digital Currencies**

- Digital currencies have several characteristics that make them attractive as a means of payment and store of value.
- First, digital currencies are decentralized, meaning they are not controlled by a central authority, such as a government or central bank. This makes them immune to government intervention, censorship, and seizure.
- Second, digital currencies are transparent, meaning all transactions are recorded on a blockchain, a public ledger that can be viewed by anyone. This makes them secure and helps prevent fraud and double-spending.
- Third, digital currencies are global, meaning they can be used anywhere in the world without the need for currency conversion. This makes them ideal for cross-border transactions and international trade.
- Fourth, digital currencies are low-cost, meaning they have lower transaction fees than traditional payment systems, such as credit cards and wire transfers. This makes them attractive to merchants and consumers alike.

### **Benefits of Digital Currencies**

Digital currencies have several benefits that could help advance a cashless economy. Digital currencies offer several benefits over traditional currencies, including:

- **Decentralization:** Digital currencies operate on a decentralized network that is not controlled by a central authority, such as a government or bank. This means that transactions can be made directly between individuals without the need for intermediaries, reducing costs and increasing efficiency.
- **Security:** Digital currencies use cryptography to secure transactions and protect against fraud and theft. The use of blockchain technology ensures that transactions are recorded on a public ledger that cannot be altered or deleted, making it more difficult for hackers to manipulate the system.
- **Lower transaction fees:** Digital currencies often have lower transaction fees compared to traditional payment methods, such as credit cards or wire transfers. This makes them a more cost-effective way to transfer money, particularly for international transactions.
- **Anonymity:** Some digital currencies, such as Bitcoin, offer a high degree of anonymity, allowing users to make transactions without revealing their identity. This can be useful for people who value privacy or who live in countries with strict financial regulations.
- **Financial Inclusion:** Digital currencies have the potential to provide financial services to people who are unbanked or underbanked, particularly in developing countries where access to traditional banking services is limited. Digital currencies can provide a low-cost and efficient way to transfer funds and access financial services.



- **Borderless transactions:** Digital currencies can be used to make transactions across borders, eliminating the need for expensive currency exchanges and reducing the risk of fraud and theft.
- **Accessibility:** Digital currencies can be accessed from anywhere in the world, as long as there is an internet connection. This makes them a convenient and accessible way to store and transfer funds, particularly for people who travel frequently.

Overall, digital currencies offer many benefits over traditional currencies and payment methods, including decentralization, security, lower transaction fees, anonymity, financial inclusion, borderless transactions, and accessibility. These benefits are driving the growth and adoption of digital currencies around the world.

### Challenges Facing Digital Currencies

While digital currencies offer numerous benefits, they also face several challenges that need to be addressed for wider adoption. Some of the challenges facing digital currencies include:

- **Lack of regulatory framework:** Digital currencies are a relatively new technology, and many countries do not have clear regulations in place to govern their use. This creates uncertainty for businesses and consumers and can lead to a lack of trust in the technology.
- **Volatility:** The value of digital currencies can be highly volatile, with prices fluctuating rapidly and often unpredictably. This can make it difficult for businesses to accept digital currencies as a form of payment and for consumers to use them as a store of value.
- **Security concerns:** Digital currencies are vulnerable to security breaches and hacking, which can result in the loss of funds. While blockchain technology is secure, digital currency exchanges and wallets are vulnerable to attacks.
- **Scalability:** The current infrastructure of many digital currencies is not scalable to support mass adoption. This can lead to slow transaction processing times and high fees during periods of high demand.
- **Limited acceptance:** While the number of businesses and individuals accepting digital currencies is growing, it is still a relatively small percentage of the overall population. This limits the usefulness of digital currencies for everyday transactions.
- **Energy consumption:** Mining digital currencies, particularly Bitcoin, requires a significant amount of energy consumption, which has raised concerns about the environmental impact of digital currencies.
- **Lack of understanding:** Many people do not fully understand how digital currencies work, which can lead to a lack of trust in the technology and limited adoption.

Overall, the challenges facing digital currencies are significant but not insurmountable. Governments, businesses, and consumers need to work together to develop a regulatory framework that balances innovation with consumer protection, and technological advancements such as layer 2 scaling solutions need to be implemented to improve scalability and transaction processing times. Education and outreach programs can also help increase understanding and trust in digital currencies, leading to wider adoption and use.

### Regulatory Landscape for Digital Currencies

The regulatory landscape for digital currencies is complex and varies significantly from country to country. Some countries have embraced digital currencies and have developed clear regulatory frameworks, while others are still grappling with how to approach this new technology. Here are some of the key regulatory issues facing digital currencies:

- **Legal status:** One of the biggest regulatory issues facing digital currencies is their legal status. Some countries have classified digital currencies as a form of currency or asset, while others have classified them as commodities or securities. This classification determines how digital currencies are regulated and what rules they must follow.
- **Money laundering and terrorism financing:** Digital currencies are often criticized for their potential use in money laundering and terrorism financing. Many countries have introduced regulations to combat these risks, such as know-your-customer (KYC) and anti-money laundering (AML) rules.

- **Taxation:** Digital currencies are often subject to taxation, but the rules and regulations vary widely between countries. Some countries have introduced specific digital currency taxation laws, while others have included digital currencies in their existing tax codes.
- **Consumer protection:** Digital currencies are not protected by traditional banking regulations, such as deposit insurance. This can leave consumers vulnerable to fraud and theft, and many countries have introduced regulations to protect consumers, such as licensing requirements for digital currency exchanges.
- **Cross-border transactions:** Digital currencies can be used to make cross-border transactions without the need for traditional banking intermediaries. This has raised concerns about how these transactions should be regulated and how they can be monitored for compliance with regulations.
- **Innovation:** Many countries recognize the potential benefits of digital currencies and want to encourage innovation in this area. Some countries have introduced sandbox programs, which allow companies to test new digital currency products and services in a controlled environment.

Overall, the regulatory landscape for digital currencies is evolving rapidly, and it can be difficult for businesses and consumers to navigate the different rules and regulations. Governments and regulatory bodies need to work together to develop clear, consistent, and effective regulatory frameworks that balance innovation with consumer protection and ensure the safe and secure use of digital currencies.

#### **Potential Impact of Digital Currencies on the Global Financial System**

Digital currencies have the potential to significantly impact the global financial system in a number of ways, including:

- **Increased financial inclusion:** Digital currencies have the potential to provide financial services to people who are currently excluded from the traditional banking system, particularly in developing countries. This could lead to increased financial inclusion and economic growth.
- **Reduced transaction costs:** Digital currencies have the potential to reduce transaction costs for both individuals and businesses, particularly for cross-border transactions. This could lead to increased trade and economic growth.
- **Disintermediation:** Digital currencies have the potential to disintermediate traditional financial intermediaries, such as banks and payment processors. This could lead to a more efficient and decentralized financial system.
- **Reduced reliance on fiat currencies:** Digital currencies have the potential to reduce reliance on fiat currencies and traditional financial systems, particularly in countries with unstable currencies or weak financial systems.
- **Increased competition:** Digital currencies have the potential to increase competition in the financial system, particularly for payment services. This could lead to lower fees and better services for consumers.
- **Regulatory challenges:** Digital currencies pose regulatory challenges for governments and financial regulators, particularly with regards to money laundering, terrorism financing, and consumer protection. These challenges need to be addressed for digital currencies to be widely adopted.
- **Economic disruption:** Digital currencies have the potential to disrupt the traditional financial system, particularly if they become widely adopted. This could lead to significant economic and social changes, which could be both positive and negative.

Overall, the potential impact of digital currencies on the global financial system is significant and complex. While they offer many potential benefits, they also pose significant regulatory and economic challenges that need to be addressed. Governments, financial regulators, and industry stakeholders need to work together to develop clear, consistent, and effective regulatory frameworks that balance innovation with consumer protection and ensure the safe and secure use of digital currencies.

**Conclusion**

Digital currencies have the potential to revolutionize the way we conduct transactions and could play a crucial role in advancing a cashless economy. They have several benefits, such as reducing the cost of transactions, increasing financial inclusion, and enhancing security and privacy. However, they also face several challenges, such as regulatory uncertainty, scalability, and security. The regulatory landscape for digital currencies varies widely around the world, and their potential impact on the global financial system is still uncertain. Nevertheless, digital currencies are likely to continue to grow in popularity and could become an important part of the financial system in the future.

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## CAPITAL MARKETS, TRADING AND PORTFOLIO MANAGEMENT SERVICES

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### ABSTRACT

*Capital markets refer to the financial markets where long-term debt and equity securities are bought and sold. These markets include stock markets, bond markets, and commodity markets, among others. Capital markets serve as a source of financing for corporations, governments, and other entities. Trading is the buying and selling of financial instruments in the capital markets. Traders aim to generate profits by taking advantage of market fluctuations, using various strategies such as technical analysis, fundamental analysis, and quantitative analysis. Trading can be done by individuals, financial institutions, or other entities. Portfolio management services refer to the professional management of investment portfolios on behalf of investors. Portfolio managers aim to maximize returns while minimizing risk by diversifying investments across different asset classes and using various investment strategies. These services are offered by investment management firms, wealth management firms, and other financial institutions. Together, capital markets, trading, and portfolio management services play a crucial role in the global economy. They facilitate the flow of capital and help investors and companies achieve their financial objectives. Capital markets refer to the financial markets where long-term debt and equity securities are bought and sold. These markets include stock markets, bond markets, and commodity markets, among others. Capital markets serve as a source of financing for corporations, governments, and other entities. Trading is the buying and selling of financial instruments in the capital markets. Traders aim to generate profits by taking advantage of market fluctuations, using various strategies such as technical analysis, fundamental analysis, and quantitative analysis. Trading can be done by individuals, financial institutions, or other entities. Portfolio management services refer to the professional management of investment portfolios on behalf of investors. Portfolio managers aim to maximize returns while minimizing risk by diversifying investments across different asset classes and using various investment strategies. These services are offered by investment management firms, wealth management firms, and other financial institutions. Together, capital markets, trading, and portfolio management services play a crucial role in the global economy. They facilitate the flow of capital and help investors and companies achieve their financial objectives.*

**KEYWORDS:** Capital Markets, Trading, Portfolio Management, Long-Term Debt, Equity Securities.

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### Introduction

Capital markets and portfolio management services are essential components of the global financial system. Capital markets are the backbone of the financial system, providing a platform for companies and governments to raise capital to finance their operations and growth. They also offer

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opportunities for investors to invest in various financial instruments and earn returns. Portfolio management services, on the other hand, are crucial for investors who want to optimize their investments and achieve their financial goals. These services provide professional management of investment portfolios, which can help investors maximize their returns while minimizing risk.

In recent years, the role of capital markets and portfolio management services has become increasingly important due to the growing complexity of financial markets and the need for sophisticated investment strategies. As a result, the demand for financial professionals with expertise in these areas has also increased. Overall, capital markets and portfolio management services are critical for the functioning of the global economy, and their importance is only likely to grow in the future as financial markets continue to evolve and become more complex.

### Objectives of Capital Markets

The primary objective of capital markets is to facilitate the efficient allocation of capital. Capital markets achieve this objective by providing a platform for the issuance and trading of securities, such as stocks and bonds, which allow companies and governments to raise capital from investors.

The following are some of the other key objectives of capital markets:

- **Facilitate Economic Growth:** Capital markets play a crucial role in promoting economic growth by providing companies and governments with access to capital that they can use to fund their operations and expand their businesses.
- **Price Discovery:** Capital markets provide a mechanism for determining the market value of securities through the process of price discovery. This helps to ensure that securities are priced fairly, and investors have access to accurate information about the value of the securities they are buying and selling.
- **Liquidity:** Capital markets provide liquidity, which means that investors can buy and sell securities quickly and easily. This helps to ensure that investors can easily access their funds when they need them and that companies can raise capital when they need it.
- **Risk Transfer:** Capital markets allow investors to transfer risk to other parties, which helps to manage risk in the financial system. For example, an investor can buy insurance on their investments or use derivatives to hedge against market fluctuations.

Overall, the objectives of capital markets are closely linked to the overall goal of promoting economic growth and stability. By providing a platform for the efficient allocation of capital, capital markets help to support investment, job creation, and economic development.

### Objectives of Portfolio Management

The primary objective of portfolio management is to maximize the returns on investment while minimizing risk. Portfolio managers achieve this objective by investing in a diversified portfolio of assets that are carefully selected and managed to achieve the desired risk and return characteristics.

The following are some of the other key objectives of portfolio management:

- **Diversification:** One of the primary objectives of portfolio management is to diversify investments across different asset classes, industries, and geographies. This helps to reduce the overall risk of the portfolio while maximizing returns.
- **Asset Allocation:** Portfolio managers also aim to allocate assets in a way that balances risk and return. They use various asset allocation strategies to achieve this objective, such as strategic asset allocation, tactical asset allocation, and dynamic asset allocation.
- **Risk Management:** Portfolio managers use various risk management techniques to minimize the risk of the portfolio, such as hedging, diversification, and asset allocation. They also monitor the portfolio to ensure that it remains within the desired risk parameters.
- **Tax Management:** Portfolio managers aim to minimize the tax liabilities of the portfolio by using tax-efficient investment strategies, such as investing in tax-free bonds or using tax-loss harvesting techniques.

Overall, the objectives of portfolio management are closely linked to the goal of maximizing returns while minimizing risk. By using various investment strategies and risk management techniques, portfolio managers aim to achieve the desired risk and return characteristics of the portfolio, which can help investors achieve their financial goals.

### Scope of Capital Markets, Trading and Portfolio Management

The scope of capital markets, trading, and portfolio management is vast and constantly evolving. These areas are critical components of the global financial system and play a vital role in the functioning of the economy.

The scope of capital markets includes:

- **Equity Markets:** This includes the buying and selling of stocks, which represent ownership in a company.
- **Debt Markets:** This includes the buying and selling of bonds, which are debt instruments issued by companies and governments.
- **Derivatives Markets:** This includes the buying and selling of financial contracts that derive their value from underlying assets such as stocks, bonds, or commodities.
- **Commodity Markets:** This includes the buying and selling of physical commodities such as gold, oil, and agricultural products.
- The scope of trading includes:
- **Technical Analysis:** This involves using charts and statistical analysis to identify patterns in market data and make investment decisions.
- **Fundamental analysis:** This involves analyzing financial statements and economic indicators to make investment decisions.
- **Quantitative Analysis:** This involves using mathematical models and algorithms to make investment decisions.

The scope of portfolio management includes:

- **Asset Allocation:** This involves determining the appropriate mix of assets for a portfolio based on the investor's risk tolerance, financial goals, and investment horizon.
- **Risk Management:** This involves using various techniques to manage the risk of the portfolio, such as diversification and hedging.
- **Performance Measurement:** This involves measuring the performance of the portfolio against its benchmark and making adjustments as necessary to achieve the desired risk and return characteristics.

Overall, the scope of capital markets, trading, and portfolio management is vast and constantly evolving. As financial markets become more complex, the scope of these areas is likely to expand to include new instruments and investment strategies.

### Valuation of Stocks and Functioning of Indian Stock Market

- **Valuation of Stocks:** The valuation of stocks involves determining the intrinsic value of a company's shares. This can be done through various methods, such as discounted cash flow analysis, price-to-earnings ratios, and price-to-book ratios. In general, the intrinsic value of a stock is determined by estimating the future cash flows that the company is expected to generate and discounting them back to the present using a suitable discount rate.
- **Functioning of Indian Stock Market:** The Indian stock market comprises two major stock exchanges, namely the National Stock Exchange (NSE) and the Bombay Stock Exchange (BSE). The market is regulated by the Securities and Exchange Board of India (SEBI), which is responsible for ensuring transparency and fairness in trading. The Indian stock market operates in a similar manner to other global stock markets. The market is open from Monday to Friday, and trading takes place between 9:15 am and 3:30 pm. The market is divided into various segments, such as equity, derivatives, and commodity trading.

The equity segment is the largest segment of the Indian stock market and comprises companies listed on the NSE and BSE. Investors can buy and sell shares of these companies through brokers, who execute trades on their behalf. The price of the shares is determined by the forces of supply and demand, with buyers and sellers bidding for shares based on their perception of the company's future prospects.

The derivatives segment of the Indian stock market includes futures and options contracts, which are financial instruments that derive their value from an underlying asset such as a stock, index, or commodity. Investors use derivatives to hedge their risks or speculate on the future direction of prices. The commodity segment of the Indian stock market includes trading in physical commodities such as gold, silver, and crude oil. The market is regulated by the Multi Commodity Exchange (MCX) and the National Commodity and Derivatives Exchange (NCDEX).

Overall, the Indian stock market plays a vital role in the economy by providing companies with access to capital and investors with opportunities to invest their money. The market is a key driver of economic growth and development, and its functioning is closely monitored by regulators to ensure transparency and fairness in trading.

### **Valuation of Bonds, Convertible Debentures and Market for Debt**

- **Valuation of Bonds and Convertible Debentures:** The valuation of bonds and convertible debentures involves determining the present value of the future cash flows that the securities are expected to generate. The present value is calculated by discounting the future cash flows back to the present using a suitable discount rate. The cash flows generated by bonds typically consist of interest payments and the principal repayment at maturity. The present value of the cash flows is determined using the current market interest rate and the credit rating of the issuer. Higher interest rates or lower credit ratings typically result in a lower valuation of the bond.

Convertible debentures are bonds that can be converted into equity shares of the issuing company at a predetermined price. The valuation of convertible debentures involves estimating the probability of conversion and the value of the underlying equity shares. The value of the convertible debenture is then calculated as the sum of the value of the bond and the value of the embedded option to convert into equity shares.

- **Market for Debt:** The market for debt includes the buying and selling of various types of debt instruments, such as bonds, debentures, and other fixed income securities. The market is typically divided into the primary market and the secondary market. The primary market is where new debt securities are issued by companies and governments to raise capital. Investors can buy these securities directly from the issuer through a public offering or a private placement. The price of the securities is typically fixed at the time of issue, and the securities are then listed on the secondary market.

The secondary market is where previously issued debt securities are traded among investors. The secondary market provides liquidity to investors by allowing them to buy and sell securities at market-determined prices. The price of the securities is determined by the forces of supply and demand, with buyers and sellers bidding for securities based on their perception of the creditworthiness of the issuer and the prevailing market conditions.

Overall, the market for debt plays a vital role in the economy by providing companies and governments with access to capital and investors with opportunities to invest their money in fixed income securities. The market is closely monitored by regulators to ensure transparency and fairness in trading.

### **New Issue Market and Merchant Banking**

- **New Issue Market:** The new issue market, also known as the primary market, is the market where newly issued securities are sold for the first time to the public. This market provides companies with a means of raising capital by selling securities to investors, such as equity shares, bonds, and debentures. The new issue market can be further divided into the public issue market and the private placement market. The public issue market involves the sale of securities to the general public through a prospectus, while the private placement market involves the sale of securities to a select group of investors, such as institutional investors.

The process of issuing securities in the new issue market involves various steps, such as the appointment of merchant bankers, the filing of a prospectus with the regulatory authorities, and the pricing of the securities. The regulatory authorities, such as the Securities and Exchange Board of India (SEBI), closely monitor the new issue market to ensure transparency and fairness in the issuance process.

- **Merchant Banking:** Merchant banking refers to a range of financial services provided by specialized financial institutions known as merchant banks. These institutions help companies to raise capital by providing advisory services, underwriting services, and other financial services related to the issuance of securities in the primary market. Merchant banks typically act as intermediaries between companies and investors, helping companies to structure their offerings, determine the appropriate pricing of the securities, and market the securities to potential investors. They also provide services related to post-issuance activities, such as managing escrow accounts and distributing dividends to investors. Merchant banks are regulated by the regulatory authorities to ensure that they adhere to ethical and professional standards in their activities. In India, merchant banking is regulated by SEBI, which has laid down various guidelines and regulations governing the activities of merchant banks in the country.

Overall, merchant banking plays a critical role in the new issue market by facilitating the process of raising capital for companies and ensuring the smooth functioning of the primary market.

#### **Dividends, Bonus & Rights Issues and Rates of Return**

- **Dividends:** Dividends refer to the portion of profits that a company distributes to its shareholders. Companies can choose to pay dividends in cash or through stock dividends. Cash dividends are paid out of the company's profits, while stock dividends involve the issuance of additional shares to shareholders. The decision to pay dividends is typically made by the board of directors, taking into account various factors such as the company's financial performance, growth prospects, and capital requirements. Companies that pay regular dividends are often seen as more stable and reliable investments.
- **Bonus and Rights Issues:** Bonus issues and rights issues are two types of stock issuances by companies to their shareholders. A bonus issue involves the issuance of additional shares to existing shareholders, free of cost, in proportion to their existing shareholding. A rights issue, on the other hand, involves the issuance of new shares to existing shareholders at a discounted price. Bonus issues and rights issues are used by companies to raise capital and to reward their existing shareholders. Bonus issues increase the number of shares outstanding, while rights issues enable existing shareholders to increase their stake in the company at a discounted price.
- **Rates of Return:** The rate of return on an investment is the percentage increase or decrease in the value of the investment over a given period. The rate of return can be calculated using various methods, such as the simple rate of return, the internal rate of return (IRR), and the time-weighted rate of return. The simple rate of return is calculated as the difference between the initial investment and the final value of the investment, divided by the initial investment, expressed as a percentage. The IRR is the discount rate that makes the net present value of the cash flows from the investment equal to zero. The time-weighted rate of return is used to calculate the performance of a portfolio over time, taking into account the effect of cash inflows and outflows. The rate of return is an important measure of the performance of an investment and is used by investors to compare different investment options. In India, the benchmark rate of return is often taken as the return on the BSE Sensex or the NSE Nifty, which are the two leading stock market indices in the country.

#### **Conclusion**

In conclusion, capital markets, trading, and portfolio management are important aspects of the financial system that play a critical role in the allocation of capital and the functioning of the economy. The capital markets provide companies with a means of raising capital through the issuance of securities, while the trading of securities allows investors to buy and sell these securities on the open market.

Portfolio management involves the management of investments on behalf of clients, with the aim of maximizing returns while minimizing risks. This involves various activities, such as asset allocation, security selection, and risk management.

Overall, the functioning of capital markets, trading, and portfolio management is governed by various rules and regulations that ensure fairness, transparency, and accountability. In India, the Securities and Exchange Board of India (SEBI) is the primary regulatory authority governing these activities and plays a critical role in ensuring the smooth functioning of the financial system.



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## जीएसटी (माल एवं सेवा कर) परिप्रेक्ष्य में भारतीय अर्थव्यवस्था: एक अध्ययन

आकांक्षा\*  
डॉ. चन्द्रकांत अवस्थी\*\*

### सार

किसी भी देश के आर्थिक विकास के लिए कर प्रणाली महत्वपूर्ण भूमिका निभाती है जो देश की अर्थव्यवस्था को मजबूती प्रदान करती है। भारतीय अर्थव्यवस्था विकासशील अर्थव्यवस्था है। भारत ने महत्वकांक्षी विकास के लक्ष्यों के रूप में जीएसटी को 1 जुलाई 2017 में लागू किया गया है जो 'मेक इन इण्डिया', 'डिजिटल इण्डिया' आदि मिशनों का समर्थन करता है। जीएसटी (माल एवं सेवा कर) एक विशाल कर की अवधारणा है जो किसी देश की आर्थिक वृद्धि का समर्थन और विशाल कर संरचना को सरल बनाता है। जीएसटी कर राष्ट्रीय स्तर पर वस्तुओं और सेवाओं के विनिर्माण, बिक्री और उपभोग पर एक व्यापक कर लेवी है। यह भारत देश का सबसे बड़ा आर्थिक कर सुधार है जो अब एक वास्तविकता के रूप में व्यापार और आम आदमी के बीच मौजूद है जो उनकी दिनचर्या का एक आम हिस्सा बन चुकी हैं। जीएसटी भारत में "एक राष्ट्र, एक बाजार, एक कर" की धारणा पर आधारित है। जीएसटी शेलआउट ने भारत को 1.3 बिलियन नागरिकों को एकीकृत बाजार में बदल दिया है। जीएसटी कर व्यवस्था को लागू किये जाने के पश्चात अप्रत्यक्ष करदाताओं की संख्या में 50 प्रतिशत की वृद्धि हुई है और अनेक करदातों ने स्वेच्छा से जीएसटी को अपनाया है। देश के प्रत्येक नागरिक का प्रत्यक्ष एवं अप्रत्यक्ष रूप से सामाजिक एवं आर्थिक विकास हेतु योगदान देता है। जीएसटी विनिर्माताओं से एकत्रित खपत आधारित कर के रूप में परिभाषित किया गया था। वस्तुओं और सेवाओं की बिक्री और खपत देश को एक एकीकृत आम बाजार में बदलने में मदद करता है। जीएसटी को अनेक कारणों से व्यापक जनसमर्थन मिला जो विशेषकर एक भारतीय बाजार सृजित करने की इसकी क्षमता, कर आधार को विस्तार प्रदान तथा सहकारी संघवाद को बढ़ावा देने में इसकी सक्षमता के कारण है। जीएसटी का अन्य लाभ अभी लोगों की नजरों में नहीं आया है और वह यह है कि इससे सूचना का एक बड़ा निक्षेपागार सृजित होगा जिससे भारत की अर्थव्यवस्था को समझने में हमारी सोच का विस्तार तथा निश्चित रूप से बदलाव आएगा। अपने शोध पत्र के अध्ययन के लिए माध्यमिक डेटा, पत्रिकाओं, पत्रिका, लेख आदि से एकत्र किया गया है। यह शोध पत्र भारतीय अर्थव्यवस्था में जीएसटी लागू होने के बाद उसकी अवधारणा व उसके प्रभावों तथा अर्थव्यवस्था के विकास में योगदान के नारे है। प्रस्तुत शोध पत्र जीएसटी परिप्रेक्ष्य में भारतीय अर्थव्यवस्था के अध्ययन पर आधारित है।

**शब्दकोश:** जीएसटी, भारतीय अर्थव्यवस्था, अप्रत्यक्ष कर।

### प्रस्तावना

कराधान हर देश के विकास की रीढ़ है। सरकारें बिना कराधान से कार्य नहीं कर सकती हैं। कर दो तरह से जमा होते हैं— प्रत्यक्ष कर और अप्रत्यक्ष कर। प्रत्यक्ष कर का बोझ किसी दूसरे पर नहीं डाला जा सकता है तथा अप्रत्यक्ष कर उपभोग आधारित है जो अंतिम वस्तु के खपत बिन्दु पर भुगतान किया जाता है।

\* शोधार्थी, पी.के. विश्वविद्यालय, करैरा, शिवपुरी, मध्यप्रदेश।

\*\* अर्थशास्त्र विभाग, पी.के. विश्वविद्यालय, करैरा, शिवपुरी, मध्यप्रदेश।

भारतीय अर्थव्यवस्था में 1 जुलाई 2017, में जीएसटी (माल एवं सेवा कर) लागू किया गया। जीएसटी एक राष्ट्र, एक बाजार, एक कर की अवधारणा पर आधारित है। भारत ने दोहरे जीएसटी मॉडल को अपनाया है जिसमें राज्यों के पास अधिनियम में निर्धारित दरों के अधीन अप्रत्यक्ष कर लगाने का अधिकार है। मलेशिया दुनिया का मात्र एक ऐसा देश है जहाँ जीएसटी 2015 में लागू होने के मात्र चार साल बाद जीएसटी की जगह बिक्री सेवा कर लागू किया गया। मलेशिया सरकार के मुताबिक जीएसटी लागू होने के बाद भी राजस्व में बढ़ोत्तरी नहीं हुई।

भारतीय अर्थव्यवस्था में दोहरे मॉडल की जीएसटी को अपनाया गया है। जीएसटी मॉडल में चार स्तरीय दरें ये हैं— 3:ए 5:ए 12:ए 18: और 28: है। जीएसटी के तहत अधिकतम दर 40: है। जीएसटी के बाद से विभिन्न क्षेत्रों में सकारात्मक और नकारात्मक प्रभाव देखने को मिले हैं। जीएसटी सम्पूर्ण रूप से डिजिटल कर प्रणाली पर आधारित है जिससे कर संग्रह और समायोजन में तेजी आयी है। जीएसटी के तहत अंतर राज्य व्यापार एक महत्वपूर्ण पहलू है जिससे केन्द्र सरकार कर एकत्र करने के लिए उत्तरदायी जिसे (आईजीएसटी) एकीकृत कर कहा जाता है। जीएसटी का भारतीय अर्थव्यवस्था पर सकारात्मक— नकारात्मक प्रभाव दोनों देखने को मिले हैं, इस अध्ययन के अन्तर्गत।

### अध्ययन के उद्देश्य

- भारतीय अर्थव्यवस्था के विकास में जीएसटी के योगदान का अध्ययन करना।
- जीएसटी और अप्रत्यक्ष पूर्व कर के संग्रह का अध्ययन।
- भारतीय अर्थव्यवस्था पर जीएसटी के प्रभावों का अध्ययन करना।
- आम आदमी (उपभोक्ता) पर जीएसटी का असर।

### साहित्य की समीक्षा

**काशिक अंसारीद और गरिमा जैन (2017)** में तर्क दिया जीएसटी भारतीय अर्थव्यवस्था में सबसे बड़ा अधिक व्यापार अनुकूल सुधार है। जीएसटी के कार्यान्वयन से जुड़ी नकारात्मक समस्याएँ जीएसटी अल्पकालिक बाधाएँ हैं लेकिन दीर्घवधि में इससे आर्थिक गतिविधियों को गति देने में मदद मिलेगी।

**बालियन, एस और राटी, पी (2018)** "भारतीय अर्थव्यवस्था के विभिन्न क्षेत्रों पर जीएसटी का प्रभाव" में सुझाव दिया कि जीएसटी कानून न केवल भारतीय अर्थव्यवस्था पर प्रभाव डालेगा बल्कि निर्यात-आयात के संदर्भ में विश्व स्तर पर भी प्रभाव डालता है।

**शिंदे, एम (2019)** ने अपने अध्ययन "भारतीय अर्थव्यवस्था के विभिन्न घटकों पर जीएसटी के प्रभाव और चुनौतियाँ का एक अध्ययन" में निर्धारित किया गया है कि कर दिशा निर्देशिका अर्थव्यवस्था पर एक बड़ी भूमिका निभाती है क्योंकि राजस्व स्रोत है इसका उत्साहजनक प्रभाव क्षमता और इक्विटी दोनों पर है। आय वितरण के मुद्दों को ध्यान में रखते हुए एक अच्छी कर प्रणाली को इसके साथ तालमेल बिठाना चाहिए और साथ ही सार्वजनिक सेवाओं और बुनियादी ढांचे के विकास पर सरकार के बहिर्वाह का सर्म्थन करने के लिए कर राजस्व बढ़ाने का प्रयास करना चाहिए।

**शर्मा, पी (2020)** में अपने अध्ययन "भारतीय अर्थव्यवस्था पर माल और सेवा कर (जीएसटी) का प्रभाव में जीएसटी प्रक्रियात्मक बोझ को कम करेगा और साथ ही कर भुगतान को सरल करेगा। यह आर्थिक प्रणाली में वृद्धि में मदद करेगा।

**कुलकर्णी, एस और अप्सिगेकर, एस (2021)** में अपने भोध में पुणे क्षेत्र के संदर्भ में भारतीय अर्थव्यवस्था पर जीएसटी के प्रभाव का एक अध्ययन" में खुलासा किया कि जीएसटी बी2जी मामलों में लाभान्वित होगा जहाँ इनपुट टैक्स क्रेडिट उपलब्ध है। जीएसटी भारतीय अर्थव्यवस्था के लिए बूम है। जीएसटी कर का दूसरा पहलू कानून अनुपालन में सरलीकरण होगा।

### अध्ययन विधि

अध्ययन विधि विश्लेषणात्मक एवं वर्णनात्मक है। जीएसटी (माल एवं सेवा कर) परिप्रेक्ष्य में भारतीय अर्थव्यवस्था का एक अध्ययन के लिए विभिन्न पुस्तकों, राष्ट्रीय और अंतर्राष्ट्रीय से एकत्र पत्रिकाओं, सरकारी रिपोर्ट, वेबसाइट, समाचार पत्र और थीसिस आदि से एकत्रित माध्यमिक डेटा का उपयोग करेंगे।

### भारतीय अर्थव्यवस्था के विकास में जीएसटी का अध्ययन

भारतीय अर्थव्यवस्था पर जीएसटी के विकास को समझते हैं :-

**जीएसटी का महत्व :-** उपभोक्ता को जीएसटी से वास्तविक और व्यवसाय से लाभ दीर्घकालिक होते हैं जो निम्नलिखित हैं-

- **करों का विलय :** केन्द्रीय और राज्य स्तर पर बड़ी संख्या में अप्रत्यक्ष कर वह सब मिलकर अब एक जीएसटी के रूप में राज्य भुल्क : वैट, विलासिता कर, बिजली भुल्क, मनोरंजन कर और प्रवेश कर। केन्द्रीय भुल्क, उत्पाद भुल्क, सीमा भुल्क, केन्द्रीय बिक्री कर, सेवा कर आदि।
- **एक देश एक कानून :** जीएसटी से पूर्व केन्द्रीय कानून और राज्य कानून से कराधान लिया जाता था। अखिल भारतीय स्तर पर अपने माल का व्यापार कर रहे हैं तो आप भारत के विभिन्न कानूनों को जानना और उसका पालन करना यही कारण है कि बहुत से लोग विभिन्न राज्यों से व्यापार करने से बचते हैं। जीएसटी लागू होने के बाद सम्पूर्ण भारत 'एक राष्ट्र, एक बाजार, एक कर' बन गया है।
- **इनपुट क्रेडिट में वृद्धि :** अंतर्राज्यीय वस्तुओं की बिक्री के लिए इनपुट क्रेडिट उपलब्ध नहीं था। जीएसटी प्रणाली के तहत उपलब्ध है, इससे व्यवसायों के लिए अगली कर देनदारी कम होगी।
- **अधिक निर्यात प्रोत्साहन :** जीएसटी कर प्रणाली से केन्द्रीय व राज्य करों को अधिक निर्यात को प्रोत्साहन मिला।
- **जीएसटी नेटवर्क :** जीएसटी नेटवर्क से सभी पंजीकरण और रिटर्न की फाइलिंग ऑनलाइन की जाती है इसलिए अपवचन की गुंजाइश काफी कम हो गई। देश के राजस्व को बढ़ावा और आर्थिक विकास में तेजी आई है।

### जीएसटी और अप्रत्यक्ष पूर्व कर का अध्ययन

#### करदाता पूर्व और जीएसटी

उपयुक्त तालिका में यह स्पष्ट है कि दिसम्बर 2017 की स्थिति के अनुसार जीएसटी में 9.8 मिलियन नाम पंजीकृत थे जिनकी संख्या पुरानी प्रणाली के तहत पंजीकृत कुल अप्रत्यक्ष करदाताओं की संख्या से मामूली अधिक है, किन्तु ये आंकड़े तुलनीय है। पुरानी प्रणाली के अंतर्गत पंजीकृत करदाता इस संदर्भ में एक समान नहीं थे कि वे अनेक करों के तहत पंजीकृत करदाता थे। करदाताओं के दो और तीन बार गिने गए आधार को समायोजित करते हुए जीएसटी ने अद्वितीय अप्रत्यक्ष करदाताओं की संख्या में 50 प्रतिशत से भी अधिक की वृद्धि हुई है जो कुल मिलाकर 3.4 मिलियन है।

तालिका पंजीकृत अप्रत्यक्ष करदाताओं की संख्या, जीएसटी लागू होने से पहले तथा बाद में मिलियन में

जीएसटी के तहत पंजीकृत करदाता					जीएसटी के तहत करदाता पूर्व में किस श्रेणी के तहत थे		जीएसटी के तहत पंजीकृत करदाता की श्रेणी		
	कुल	नए	पुराने	उत्पाद शुल्क	सेवा कर	जीएसटी	नए	संरचना	नियमित
भारत	9.8	3.4	6.4	.01	.06	5.8	3.4	1.6	8.2

स्रोत- आर्थिक समीक्षा में किए गए परिकल्पना जीएसटी आंकड़ों पर आधारित है।

जीएसटी के कार्यान्वयन के बाद जीएसटी और अप्रत्यक्ष कर जीएसटी संग्रह 01 जुलाई, 2017 को लागू किया गया था। जीएसटी वेबसाइट से प्राप्त आंकड़ों के अनुसार, 01 जुलाई, 2017 से 31 मार्च, 2018 तक 462199 करोड़ रुपये एकत्र किए गए। द्वितीय वर्ष 2018 के दौरान कुल जीएसटी संग्रह लगभग 8.76 लाख करोड़ था जो वित्तीय वर्ष 2017-2018 की तुलना में दोगुना संग्रह था। वित्तीय वर्ष 2018-2019 के दौरान लगभग 924815 करोड़ और वित्तीय वर्ष 2020-2021 के दौरान 8.7 लाख करोड़ से अधिक का संग्रह किया गया। उपयुक्त आंकड़ों से ज्ञात होता है कि जीएसटी भारतीय अर्थव्यवस्था के सही कदम साबित हुआ है।

#### भारतीय अर्थव्यवस्था पर जीएसटी का प्रभाव

जीएसटी का भारतीय अर्थव्यवस्था पर प्रभाव का अध्ययन करते हुए हम सिक्के के दोनों पक्षों (गुण और दोष) का ध्यान दिया है।

#### जीएसटी जिन प्राथमिक उद्देश्यों के साथ पेश किया गया था वे हैं—

- करदाताओं द्वारा भुगतान किए जाने वाले अप्रत्यक्ष करों की संख्या के बारे में भ्रम को दूर करना तथा इसमें करों से कैस्केडिंग प्रभाव का हटाना भी शामिल है।
- जीएसटी का उद्देश्य देश में करदाताओं की संख्या में बढ़ोत्तरी करना है जो देश के आर्थिक विकास में मदद करेगा।
- भ्रष्टाचार मुक्त राष्ट्र और कर चोरी की घटती दरों को भी जीएसटी के उद्देश्यों के रूप में गिनाया।

जीएसटी की भुरुआत का देश के सफल घरेलू उत्पाद (जीडीपी) पर प्रभाव पड़ा। जीडीपी की विकास दर 8.95% थी जो कि 15.54% की वृद्धि थी जिसके बाद क्रमशः 2019, 2018, 2017 में 10.33%, 2.72% और 0.34% की गिरावट आई।

#### जीएसटी की भुरुआत के बाद देश के सकल घरेलू उत्पाद की वृद्धि के कारण निम्नलिखित हैं—

- एक लेन-देन पर विभिन्न कर दरों को हटा दिया गया और एक समान कराधान प्रणाली भुरु की गई जिसके द्वारा कर कार्यान्वयन सरल हो गया।
- जीएसटी ने लेन-देन की लागत को कम कर दिया। उदाहरण के लिए प्रारम्भ में एक लेन-देन पर 10 से अधिक प्रकार के कर लगते थे। व्यापारियों को परेशानी हो रही थी और इस बजह से कारोबार फलफूल नहीं रहा था।
- जीएसटी की भुरुआत के बाद कर भुगतान सरल हो गया और लोगों को एक एकीकृत कर का भुगतान करके व्यवसाय करने के लिए प्रोत्साहित किया गया। जीएसटी से पहले और बाद में भुगतान की गई राशि में बहुत अधिक अंतर नहीं था, लेकिन लोगों को दस से अधिक प्रकार के करों के स्थान पर एक ही कर का भुगतान आसान लगा।

जीएसटी के परिणामस्वरूप देश में अधिक वस्तुओं और सेवाओं का निर्माण किया गया जिससे भुद्ध निर्यात में वृद्धि हुई। यदि कोई देश अपने निर्यात से अधिक है तो इसका मतलब है कि देश के पास व्यापार अधिशेष है जिसमें निर्माताओं से मात्र का उच्च स्तर का उत्पादन होता है जिससे रोजगार में वृद्धि होती है। जब देश अधिक निर्यात कर रहा होता है तो यह अर्थव्यवस्था में धन के प्रवाह को भी आरंभ करता है जिससे आर्थिक विकास में योगदान होता है। इसने विदेशी मुद्रा दरों को और अधिक अनुकूल बना दिया है।

#### भारतीय अर्थव्यवस्था पर जीएसटी का सकारात्मक प्रभाव

जीएसटी ने सम्पूर्ण भारत में वस्तुओं और सेवाओं की आपूर्ति के स्तर पर लगाया जाता है। जीएसटी करदाताओं पर तब लगाया जाता है जब वस्तुओं और सेवाओं का उपभोग किया जाता है। जीएसटी तीन प्रकार के होते हैं।

- सीजीएसटी (सेंट्रल गुड्स एंड सर्विसेज टैक्स) जो केन्द्र सरकार द्वारा माल और सेवाओं की इंट्रास्टेट बिक्री पर एकत्र किया जाता है।
- एसजीएसटी (स्टेट गुड्स एंड सर्विसेज टैक्स) जो राज्य सरकार द्वारा इंट्रास्टेट बिक्री पर एकत्र किया जाता है।
- आईजीएसटी (इंटीग्रेटेड गुड्स एंड सर्विसेज टैक्स) केन्द्र और राज्य दोनों सरकारों द्वारा एकत्र और साझा किया जाता है जब वस्तुओं और सेवाओं की आपूर्ति एक राज्य से दूसरे राज्य में भी जाती है। यह आयात और निर्यात पर भी लागू होता है।

#### भारतीय अर्थव्यवस्था पर जीएसटी के सकारात्मक प्रभाव निम्नलिखित हैं—

- **सरल कर संरचना** : एकल कर और उसकी आसान गणना ने जीएसटी ने भारत को एक सरल कर संरचना प्रदान की है। खरीदे गए उत्पाद के लिए भुगतान करने पर खरीदार को एक स्पष्ट विचार मिलता है कि उसने कितना कर चुकाया है।
- **छोटे और मध्यम उद्यमों के लिए समर्थन** : यह ध्यान दिया जाना चाहिए कि भुगतान की जाने वाली जीएसटी राशि कर्म के वार्षिक कारोबार और आकार पर निर्भर करती है। यह छोटे और मध्यम उद्यमों के लिए इनाम रहा है।
- **उत्पादन के लिए अधिक धन** : जीएसटी कुल कर योग्य आय को कम करने में सफल रहा है जिससे उत्पादन के लिए अधिक धन जुड़ गया है।
- **सम्पूर्ण भारत में परिचालन में वृद्धि** : एकल एकीकृत कर प्रणाली के कारण पूरे भारत में परिचालन में वृद्धि हुई है जिससे पूरे भारत में माल परिवहन आसान हो गया है।
- **निर्यात में वृद्धि** : माल पर सीमा शुल्क में कमी से निर्यात की मात्रा में वृद्धि हुई है। जीएसटी लागू होने के बाद उत्पादन इकाईयाँ भी माल उत्पादन करते समय पैसा बचा रही है।

#### भारतीय अर्थव्यवस्था पर जीएसटी का नकारात्मक प्रभाव

भारतीय अर्थव्यवस्था पर जीएसटी के नकारात्मक प्रभाव निम्नलिखित हैं—

- **आम आदमी पर नकारात्मक प्रभाव** : जीएसटी एक अप्रत्यक्ष कर होने के कारण बिक्री मूल्य में वृद्धि के माध्यम से वसूल किया जाता है। यह बदले में मध्यम और निम्न मध्यम वर्ग के लोगों को प्रभावित करता है और इसलिए आम आदमी पर नकारात्मक प्रभाव पड़ता है।
- **बाजार पर नकारात्मक प्रभाव** : सामान्य तौर पर कर्मों को इनपुट टैक्स क्रेडिट सिस्टम के साथ समस्याओं का सामना करना पड़ता है, जिससे कार्यशील पूँजी आवश्यकताओं को प्रभावी तरीके से प्रभावित करने में विफल रहता है, यही कारण कि जीएसटी का बाजार पर नकारात्मक प्रभाव पड़ा।
- **बेरोजगारी पर जीएसटी का नकारात्मक प्रभाव** : जीएसटी (जुलाई 2017) के कार्यान्वयन के बाद भारत में जुलाई 2017 से फरवरी 2018 की अवधि के दौरान बेरोजगारी दर 3.39 से बढ़कर 6.06 हो गई थी। व्यवसाय निर्माण आसान होने के साथ, स्वरोजगार बढ़ रहा है लेकिन केवल उन लोगों के लिए जो इसे वहन कर सकते हैं।

#### उपभोक्ता मूल्य सूचकांक (सीपीआई) पर जीएसटी का प्रभाव

उपभोक्ता मूल्य सूचकांक या सीपीआई परिवार द्वारा खरीदी गई उपभोक्ता वस्तुओं और सेवाओं की एक टोकरी के मूल्य स्तर में परिवर्तन के माप को दर्शाता है। जीएसटी के प्रभावों की गणना कुल सीपीआई को ध्यान में रखकर की जा सकती है। सीपीआई के लगभग 3.24: होने की उम्मीद थी जब भारत सरकार ने देश में जीएसटी पेश किया था। सरकार ने माना कि उपभोक्ताओं की क्रय भावित बढ़ेगी क्योंकि वे केवल एकीकृत कर

का भुगतान करेगे न कि वस्तुओं और सेवाओं पर अलग-अलग करों का सीपीआई 4<sup>प</sup>61: इससे हम कह सकते हैं कि सीपीआई में 1<sup>प</sup>37: की वृद्धि हुई। सीपीआई को अर्थव्यवस्था पर जीएसटी के प्रभावों को इंगित करने के लिए एकमात्र उपाय नहीं माना जा सकता है क्योंकि इसे उन कारणों में से एक माना जा सकता है जहाँ अर्थव्यवस्था की क्रय भाक्ति कम हो सकती है। जीएसटी ने प्रत्यक्ष और अप्रत्यक्ष तरीकों से सरकार के लिए एक बड़ी आय अर्जित की है। आंकड़ों से ज्ञात होता है कि जीएसटी लागू होने के बाद उपभोक्ताओं की क्रय भाक्ति प्रभावित हुई है। इस प्रकार भारतीय अर्थव्यवस्था में मुद्रास्फीति की दर बढ़ रही है। यह विभिन्न कारणों से हो जाता है और न केवल जीएसटी की अवधारणा के कारण क्योंकि इससे अर्थव्यवस्था के लिए विभिन्न फायदे हैं। जीएसटी कई अन्य तरीकों से अर्थव्यवस्था के लिए फायदेमंद साबित हुआ है।

### आम आदमी पर जीएसटी का प्रभाव

भारतीय कराधान प्रणाली में जीएसटी लागू होने से वस्तुओं और सेवाओं के खरीदारों को अब उनके द्वारा खरीदी जाने वाली वस्तुओं और सेवाओं पर अधिक करों का भुगतान करना पड़ता है। लेकिन आम आदमी के लिए जीएसटी के दीर्घकालीन लाभ बहुतायत हैं। एफएमसीजी और ऑटोमोटिव क्षेत्र जैसे उपभोक्ता वस्तुओं के उत्पादकों द्वारा देय करों में कमी के कारण वस्तुओं की कीमत में कमी आई है। इसने और अधिक उपभोक्ताओं को इसकी सेवाओं का लाभ उठाने की अनुमति दी। कीमतों में गिरावट मांग में वृद्धि के सीधे आनुपातिक है जिससे लाभ के मामलों में उत्पादन चक्र को बढ़ावा मिलता है। ऐसे परिदृश्यों में खरीदार और विक्रेता दोनों को एक उचित मौद्रिक हिस्सा मिलता है जिससे आर्थिक विकास में योगदान मिलता है। उत्पादन वृद्धि अधिक रोजगार और आय में वृद्धि के लिए जगह बनती है। जीएसटी के आगमन के साथ, काले धन, भ्रष्टाचार प्रथाओं के लिए गुंजाइश अपेक्षाकृत कम हो गई है जिससे भारत में आम आदमी का पैसा सुरक्षित हो गया है।

### निष्कर्ष

जीएसटी (माल एवं सेवा कर) का भारतीय अर्थव्यवस्था पर सकारात्मक और नकारात्मक दोनों प्रभाव पड़ा है। यह पारदर्शी होने के कारण आर्थिक विकास को सुगम बनाता है और कमोड़िटी की बढ़ी हुई कीमतों से कुछ क्षेत्रों में नुकसान पैदा करता है लेकिन व्यापार करने में आसानी देश में एकीकृत कराधान प्रणाली द्वारा मदद की गई है। जीएसटी भारतीय अर्थव्यवस्था के लिए एक अहम कदम साबित हुआ है।

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## राष्ट्रीय अर्थव्यवस्था के विकास के संदर्भ में पर्यटन के प्रकार और प्रेरक तत्व

डॉ. मनोज कुमार सेठिया\*

### प्रस्तावना

#### पर्यटन: अवधारणा

पर्यटन कोई नवीन विचार अथवा अवधारणा नहीं है, अपितु इसका सम्बन्ध मानव सभ्यता काल से रहा है जैसे कि आदम तथा हवा को प्रथम पर्यटक कहा जाता है।<sup>1</sup> उन्होंने विश्व में सर्वप्रथम पर्यटन की नींव रखी थी। मानव सभ्यता के क्रमिक विकास के कारण मानव में जिज्ञासा, विवेक और नवीन वस्तुओं, स्थानों तथा विचारों के प्रति कौतुहल विकसित होने लगा। व्यक्ति इस जिज्ञासा को संतुष्ट करने के लिए दुर्लभ स्थानों तथा वस्तुओं के प्रति आकर्षित होने लगा। यहीं से मानव सभ्यता में उद्देश्यपूर्ण भ्रमण प्रवृत्ति का विकास होने के प्रमाण मिले हैं। मानव की इस लक्ष्यप्रधान भ्रमण पद्धति को ही पर्यटन के नाम से जाना जाता है।

आधुनिक युग में पर्यटन के प्रति धारणा, प्रारूप, लक्ष्यों में भी व्यापक अंतर आया है। पर्यटन की ऐतिहासिक और आधुनिक विचारधाराओं, लक्ष्यों, स्वरूपों और व्यूह रचनाओं में आए बदलाव को समझने से पूर्व पर्यटन के अभिप्राय और प्रवृत्ति का विश्लेषण करना आवश्यक है।

- पर्यटन शब्द की उत्पत्ति संस्कृत भाषा में 'अटन' धातु से हुई है, जिसका तात्पर्य किसी व्यक्ति के द्वारा अपने स्थान को किसी प्रयोजनार्थ अल्प समय के लिए छोड़ने से है।<sup>2</sup>
- पर्यटन को लेटिन भाषा में श्चतददेश कहा जाता है, वहीं अंग्रेजी भाषा में श्चनतपेउश कहा जाता है, जिसका अर्थ है, रुचि के स्थानों की यात्रा करना।
- पर्यटन व्यक्ति के आर्थिक, सामाजिक, सांस्कृतिक और राजनीतिक विकास से जुड़ा है।
- पर्यटन की अवधारणा को समीकरण रूप में निम्न प्रकार देखा जा सकता है।  
पर्यटन = अधिशेष आय + अवकाश + सामाजिक अनुमति।
- यात्रा और पर्यटन भिन्न हैं। एक स्थान से दूसरे स्थान पर प्रस्थान, जिसका लक्ष्य किसी कार्य को निष्पादित करना तथा रोजगार प्राप्त करना होता है, यात्रा कहलाती है।
- जबकि पर्यटन वह भ्रमण है, जिसमें निवास स्थान से पृथक होकर अस्थायी रूप से अन्यत्र प्रस्थान किया जाता है। अतः यह स्पष्ट है कि सभी पर्यटन यात्रा है, जबकि सभी यात्राएं पर्यटन नहीं हो सकती।
- स्पष्ट है कि सभी पर्यटन यात्रा है, जबकि सभी यात्राएं पर्यटन नहीं हो सकती।

\* सहायक आचार्य, बी.जे.एस. रामपुरिया जैन कॉलेज, बीकानेर, राजस्थान।

**डब्ल्यू.टी.ओ.** द्वारा प्रसारित प्रतिवेदन में दी गई पर्यटन की परिभाषा निम्न है—

“किसी व्यक्ति के द्वारा एक वर्ष से कम अवधि के भीतर अपने सामान्य वातावरण से अलग रहना पर्यटन है। इसके व्यावसायिक व अन्य लक्ष्य भी हो सकते हैं।”

**टूरिज्म सोसायटी ऑफ ब्रिटेन के अनुसार :-** “पर्यटन अपने निवास स्थान से दूरस्थ स्थानों की अस्थायी, अल्पकालीक यात्रा है, जहाँ वे तरह तरह के क्रयाकलापों के द्वारा मनोरंजन करते हैं।”

**विश्व यात्रा एवं पर्यटन परिशद (WTTC) के अनुसार :-** “यात्रा एवं पर्यटन यात्रियों के उपयोग के लिए उत्पादन एवं सेवाओं को प्रस्तुत करता है।”<sup>1</sup>

उपरोक्त अवधारणात्मक विचारों एवं परिभाषा के अध्ययन से पर्यटन की निम्न विशेषताएं उजागर होती हैं —

- किसी स्थान या स्थानों का अल्पकालीन भ्रमण जो किसी निमित्तवश होता हो, पर्यटन है।
- पर्यटन, प्रवसन से अलग है, क्योंकि प्रवसन पर्यटन से दीर्घावधि के लिए होता है, जबकि पर्यटन अल्पकाल के लिए निश्चित लक्ष्य के लिए होता है।<sup>2</sup>
- पर्यटन के कारण स्थान विशेष की विभिन्न गतिविधियां क्रियाशील हो जाती हैं, जैसे — सेवा क्षेत्रों की क्रियाएं, औद्योगिक क्रियाएं, आवास, परिवहन आदि।
- पर्यटन का मुख्य उद्देश्य मनोरंजन तथा जिज्ञासा संतुष्टि करते हुए ज्ञानार्जन होता है।
- पर्यटन की विभिन्न परिभाषाओं के आधार पर यह कहा जा सकता है कि पर्यटन केवल घूमने-फिरने की क्रिया तक ही सीमित नहीं है बल्कि उद्देश्य प्रयोजन और विशय-क्षेत्र के अन्तर्गत पर्यटन की सीमाएं अनन्त हैं। पर्यटन एक बहुआयामी अवधारणा है। पर्यटन का स्वरूप जैसे आज वृहद रूप ले चुका है वैसे ही अब इसके आकार-प्रकार में भी विविधता और नये आयाम जुड़े हैं। पर्यटन के आकार-प्रकार के आधार पर पर्यटन को निम्न श्रेणियों में विभाजित किया जा सकता है :-

#### क्षेत्रीयता के आधार पर

पर्यटन अब किसी विशेष क्षेत्र तक सीमित नहीं रहा है। सूचना, संचार एवं परिवहन के साधनों के निरन्तर विकास से देशों की दूरियाँ ही कम नहीं हुई हैं, बल्कि विश्व पर्यटन में भी बेतहाशा तेजी आयी है। क्षेत्रीयता के आधार पर पर्यटन की निम्न श्रेणियों की जा सकती हैं—

- **आंतरिक या घरेलू पर्यटन :-** एक देश के नागरिकों द्वारा अपने देश की सीमाओं के अन्तर्गत किया जाने वाला पर्यटन आंतरिक पर्यटन कहलाता है। ऐसे पर्यटन को स्वदेशी या घरेलू पर्यटन भी कहा जाता है। इसके तहत नागरिक अपने देश के अंदर ही विभिन्न स्थानों की यात्रा करते हैं।
- **बाह्यागमन या विदेशी पर्यटन :-** एक देश से दूसरे देश की यात्रा या भ्रमण इस प्रकार के पर्यटन की श्रेणी में आते हैं। एक देश से दूसरे देश में यात्रा एवं भ्रमण के ऐसे पर्यटन के लिए वीजा लेने की भी विशेष जरूरत पड़ती है। विदेशी पर्यटन के अन्तर्गत पर्यटक सामान्यतः स्वदेश यानी अपने देश में निवास करते हैं, परन्तु सैर-सपाटे के लिए विदेश जाते हैं।

#### अवधि की प्रकृति के आधार पर

अवधि एवं समय की प्रकृति के आधार पर पर्यटन को निम्न प्रकार से वर्गीकृत किया जा सकता है—

- **आवासीय पर्यटन :-** एक माह से अधिक अवधि के लिए किसी स्थान विशेष पर अवकाश व्यतीत करने को आवासीय पर्यटन की श्रेणी में लिया जाता है। इसके तहत भांति एवं आराम के लिए पर्यटक प्राकृतिक स्थानों पर जाते हैं और अवकाश का अपना सारा समय उसी स्थान पर बिताते हैं

- **घुमावदार पर्यटन :-** अवकाश के अपने समय के दौरान एक पर्यटन स्थल पर जाने की बजाय भिन्न-भिन्न स्थानों पर कुछ समय के लिए ठहर कर यात्रा करना घुमावदार पर्यटन कहलाता है। ऐसे पर्यटन में पर्यटक एक स्थान से दूसरे स्थान की निरन्तर यात्रा करते रहते हैं। आजकल "पैकेज टूर" के अंतर्गत एवं निर्धारित अवधि में बहुत से स्थानों की सैर करवायी जाती है।

#### मौसम एवं ऋतुओं के आधार पर

पर्यटन जब किसी विशेष मौसम एवं ऋतु के आधार पर किया जाता है तो ऐसा पर्यटन मौसम आधारित पर्यटन कहलाता है। बर्फ वाले स्थानों पर लोग बर्फ के गिरते समय जाना चाहते हैं तो प्राकृतिक स्थलों पर बरसात के बाद बहने वाले झरनों, प्रपातों को निहारने लोग जाना चाहते हैं। कुछ स्थान ऐसे हैं जो प्राकृतिक विविधताओं से अत्यधिक समृद्ध होते हैं, परन्तु बरसात में वहाँ अत्यधिक बरसात होने के कारण उस दौरान लोग वहाँ नहीं जाना चाहते। इस प्रकार मौसम एवं ऋतु के आधार पर किया जाने वाला पर्यटन ऐसी श्रेणी में आता है। मौसम एवं ऋतुओं के आधार पर पर्यटन को निम्न प्रकार से वर्गीकृत किया जा सकता है -

- **ग्रीष्मकालीन पर्यटन :-** गर्मी की ऋतु में किया जाने वाला पर्यटन ग्रीष्मकालीन पर्यटन कहलाता है। ग्रीष्मकाल में समुद्र तटों, पहाड़ी स्थानों पर जाने की प्रवृत्ति से इस प्रकार के पर्यटन को बढ़ावा मिलता है। गर्मी के मौसम में ठंडे स्थानों पर जाने, पर्वतों की गोद, झरनों के गान का आनंद लेने के अंतर्गत इस प्रकार के पर्यटन आते हैं।
- **शीतकालीन पर्यटन :-** सर्दी के मौसम में किसी स्थान विशेष पर किया जाने वाला पर्यटन ऐसी श्रेणी में आता है। बहुधा ठंडे इलाकों में भीतकाल में बर्फ गिरते देखने की चाह से ऐसा पर्यटन किया जाता है। बर्फ पर फिसलने आदि के लिए भी ऐसा पर्यटन होता है।

#### रुचियों के आधार पर

पर्यटन की बढ़ती प्रवृत्ति के साथ-साथ अब लोग अपनी रुचि के आधार पर पर्यटन का क्रियान्वयन करने लगे हैं। रुचि के आधार पर पर्यटन को निम्न प्रकार से वर्गीकृत किया जा सकता है:-

- **साहसिक पर्यटन :-** साहस से सम्बन्धित खेलों के लिए किया जाने वाला पर्यटन साहसिक पर्यटन की श्रेणी में आता है। इसके तहत पर्वतारोहण, जलक्रीड़ा, हैंग ग्लाइडिंग, दुर्गम स्थानों पर ट्रेकिंग आदि के लिए पर्यटन किया जाता है।
- **समुद्र पर्यटन :-** अन्तर्राष्ट्रीय पर्यटन प्रवृत्तियों के अन्तर्गत समुद्री यात्रा की बढ़ती लोकप्रियता के तहत समुद्र पर्यटन की ओर लोग निरन्तर प्रवृत्त हुए हैं। रुचियों के आधार पर हवाई जहाज, बस-रेल की बजाय समुद्र से यात्रा करना ऐसे पर्यटन में आता है। इसके तहत समुद्री जहाज को यात्रा की तमाम सुविधाओं से सुसज्जित किया जाता है।
- **ग्रामीण पर्यटन :-** गाँवों के माहौल, वहाँ की हस्तकलाओं, वातावरण आदि के लिए इधर ग्रामीण पर्यटन में भी लोगों की खासी रुचि पैदा हुई है। ऐसे पर्यटन के अन्तर्गत गाँव के सहज वातावरण, वहाँ की सौधी मिट्टी की महक, झोंपड़ियाँ, लहलहाती फसलें, काम करते किसानों को देखने की रुचि के वशीभूत पर्यटक पर्यटन करते हैं।
- **मनोरंजन सम्बन्धी पर्यटन :-** नई-नई चीजों, संगीत, नृत्य आदि से मनोरंजन करने के उद्देश्य से किया जाने वाला पर्यटन इस श्रेणी में आता है। रामोजी सिटी, हैदराबाद इसका प्रमुख उदाहरण है। मनोरंजन के हिसाब से रामोजी सिटी में फिल्मों की भूटिंग तो होती ही है, पर्यटकों की भी खूब आवा-जाही होती है। मॉल, भाँप, मल्टीप्लेक्स संस्कृति आदि के कारण यहाँ मनोरंजन सम्बन्धी पर्यटन में अप्रत्याभित वृद्धि हुई है।

### सामाजिक पर्यटन

सामाजिक पर्यटन, पर्यटन का वह स्वरूप है जो कि उन व्यक्तियों के द्वारा निर्मित किया गया है जो सामाजिक दखलन्दाजी के बिना इसकी लागत के भार को वहन नहीं कर सकते हैं। ऐसे पर्यटन में सीमित साधनों के लोगों को पर्यटन में सम्मिलित किया जाता है और उन्हें प्रोत्साहित किया जाता है। सामाजिक पर्यटन को निम्न आधार पर वर्गीकृत किया जा सकता है :-

- **जन पर्यटन :-** किसी स्थान विशेष पर समूह से जाने की योजना के साथ पर्यटन करना सामूहिक पर्यटन कहलाता है। ऐसे पर्यटन के अंतर्गत लोग समूह में यात्रा करते हैं। तीर्थ स्थानों, सुप्रसिद्ध स्थानों पर एक साथ समूह में जाकर अपने घूमने-फिरने की सोच को इसके तहत क्रियान्वित किया जाता है।
- **आर्थिक सहायता प्राप्त पर्यटन :-** सरकारी संस्थाओं, क्लबों आदि में आजकल पर्यटन के लिए सहायता दी जाती है। इसके तहत जो उन संस्थाओं, क्लब के सदस्य होते हैं, उन्हें पर्यटन के लिए प्रोत्साहन स्वरूप आर्थिक सहायता उपलब्ध करायी जाती है।
- **वातावरण पर्यटन :-** अपने सामान्य निवास स्थान से किसी अन्य स्थान पर समूह में जाकर वहाँ विशेष वातावरण का निर्माण कर पर्यटन करना वातावरण पर्यटन कहलाता है। इसके तहत किसी सामान्य स्थान पर समूह गतिविधियों से अपनी क्रियाओं द्वारा पर्यटन का वातावरण पैदा करके घूमने-फिरने का आनंद लिया जाता है।

### पर्यटकों की संख्या के आधार पर

- व्यक्तिगत यात्राएँ (एक व्यक्ति की यात्रा)
- सामूहिक यात्राएँ (अधिक व्यक्तियों की यात्रा)

### उद्देश्य के आधार पर

- व्यावसायिक उद्देश्य की यात्राएँ (व्यावसायिक प्रयोजनार्थ)
- सामान्य रुचि की यात्राएँ ( सामाजिक, धार्मिक यात्राएँ आदि)
- विशिष्ट मनोरंजन, खोजनीय यात्राएँ (साहसिक, ऐतिहासिक, नये पर्यटन स्थलों की खोज करना,)

### परिवहन सुविधाओं/संसाधनों के आधार पर

- सड़क पर्यटन (भूमि पर चालित साधनों द्वारा)
- जल पर्यटन (जल पर आधारित साधन)
- आकाशीय पर्यटन (आकाश पर आधारित साधन)
- बिना किसी साधन के पर्यटन (पैदल यात्रियों के द्वारा सम्पादित)

### व्यवस्था के आधार पर

- आत्मनिर्भर पर्यटन (सभी सुविधाएँ पृथक रूप से क्रय करना)
- पैकेज टूर पर्यटन (सभी सुविधाएँ पैकेज में समाहित)

### अन्य कुछ विशेष प्रयोजन के आधार पर

- धार्मिक और आध्यात्मिक पर्यटन (धार्मिक हलचलों और अनुष्ठानों से रुबरू होने के उद्देश्य से)
- ऐतिहासिक और विरासतीय पर्यटन (प्रादेशिक ऐतिहासिक विरासत की लालसा को संतुष्ट करने के उद्देश्य से)
- सांस्कृतिक पर्यटन (प्रदेश की सांस्कृतिक पहचान से पूर्ण परिचित होने के उद्देश्य से)

- ग्राम्य पर्यटन (प्रदेश की दुर्लभ ग्रामीण जीवन शैली, प्राकृतिक जीवन और समृद्ध हस्तकलाओं से रू-ब-रू होने के उद्देश्य से)
- चिकित्सकीय पर्यटन (तनाव घटाने, शरीर को फिट रखने, ऊर्जावान बनने के उद्देश्य से)
- शैक्षणिक और अनुसंधानात्मक पर्यटन (शोध कार्य करने के विशेष संदर्भ में)
- रोमांचक पर्यटन (रोमांचकारी गतिविधियों की अभिरूचि के उद्देश्य से)
- पारिस्थितिकी पर्यटन
- संवादात्मक पर्यटन
- मनोरंजनात्मक पर्यटन

उपरोक्त से स्पष्ट है कि प्रत्येक पर्यटक का अपना एक विशेष पर्यटन प्रयोजन होता है, जिससे प्रेरित होकर ही वह पर्यटन का निर्णय लेता है। वैसे तो स्थान परिवर्तन मनुष्य की एक स्वाभाविक प्रवृत्ति है, लेकिन सभी को पर्यटकों की श्रेणी में नहीं लिया जा सकता। विषय के गंभीर अध्ययन के लिए यह अन्तर ज्ञात होना अनिवार्य है कि कौन से व्यक्ति पर्यटक की श्रेणी में शामिल है और कौन से नहीं।

अतः पर्यटक वही होता है जो –

- किसी सामान्य या विशिष्ट प्रयोजन से अल्पकालीन यात्राएँ करता है।
- पर्यटक के लिए मूल स्थान से अलग होना अनिवार्य है।
- व्यावसायिक तथा सम्प्रेषणात्मक यात्री भी पर्यटक कहे जा सकते हैं।

#### पर्यटन के प्रेरक तत्व

पर्यटन के मूल में कोई प्रेरणा ही छुपी होती है। कोई प्रकृति की सुन्दरता को निहारने के लिए घर से बाहर निकलता है तो कोई आत्म ज्ञान और संतोष के लिए भ्रमण करने की ओर उन्मुख होता है। अपने रिश्तेदारों, दोस्तों से मिलने जाने, बाजार-मेलों के आकर्षण में पर्यटन की प्रेरणा मिलती है। मुख्य रूप से पर्यटन की प्रेरणा को निम्न तत्त्व प्रभावित करते हैं :-

- **बाहरी-परिवेश** से रू-ब-रू होने का आकर्षण :- पर्यटन की प्रेरणा के पीछे मुख्य कारण घर से बाहर की दुनिया के बारे में जिज्ञासा ही है। गर्म प्रदेशों के लोग ठंडे प्रदेशों में, रेगिस्तान में समुद्र तटों और पहाड़ पर जाने का आकर्षण रखते हैं। घर से बाहर वन्य जीव, हरितिमा से आच्छादित भूमि, नदियां, कल-कल बहते झरनों आदि के साथ ही इधर के वर्षों में साहसी खेलों के प्रति बढ़ते रुझान के कारण विभिन्न प्रकार की सफारी, हैंग ग्लाइडिंग, रिवर राफ्टिंग, पर्वतारोहण आदि के कारण भी घर से बाहर लोग निकलते हैं।
- सामाजिक प्रतिष्ठा :- निवास स्थान से बाहर किसी सुप्रसिद्ध स्थान पर जाकर अवकाश बिताने, विदेश की सैर करना आज 'सोशल स्टेटस' का प्रतीक है। बहुत से लोग केवल इसीलिए यात्रा करते हैं कि इसमें वे अपनी सामाजिक प्रतिष्ठा को जोड़े हुए हैं। हमारे देश में अगर कोई व्यक्ति विदेश यात्रा करके लौटता है तो उसे विशिष्ट रूप में देखा जाने लगता है। अपने आपको खास कहलाने की चाह ही पर्यटन की प्रेरणा का एक बड़ा कारण है।
- व्यवसाय कारोबार :- पर्यटन प्रेरणा का एक बड़ा कारण व्यवसाय या कारोबार भी है। आदिकाल से कारोबार के सिलसिले में लोग अपने निवास स्थान से दूसरे भाहर या विदेश चले जाते हैं। वास्कोडिगामा की भारत की खोज भी दरअसल कारोबार के सिलसिले में ही की गई थी। जैसे-जैसे संचार साधनों का विकास हुआ, दूरियाँ सिमटने लगी और एक देश से दूसरे देश की पहुँच भी सुगम हो गयी। व्यवसाय-कारोबार के सिलसिले में यात्राओं और पर्यटन का यह क्रम और तेज हो चुका है।

भूमंडलीकरण के बाद भारत के विदेशी कारोबार में भी अच्छी-खासी बढ़ोतरी हुई है। वर्ष 2002-03 में जहाँ भारत का विदेशी व्यापार 144.2 अरब डॉलर था, आज वह बढ़कर 186.69 अरब डॉलर हो गया है। गौरतलब है कि आठ से दस लाख विदेशी यात्राएँ व्यवसाय या कारोबार के सिलसिले में होती हैं।

- उच्च शिक्षा :- पर्यटन के प्रति आकर्षण की एक बड़ी वजह उच्च शिक्षा प्राप्त करना भी है। प्राचीनकाल में नालंदा और तक्षशिला विश्वविद्यालय उच्च शिक्षा प्राप्ति के दो बड़े केन्द्र थे। यहाँ पर विश्वभर से विद्यार्थी अध्ययन करने जाया करते थे। भारत सरकार का मानव संसाधन विकास मंत्रालय और विदेशी दूतावासों द्वारा प्रतिवर्ष योग्य विद्यार्थियों को उच्च शिक्षा प्राप्ति के लिए छात्रवृत्तियाँ दी जाती हैं।
- विदेशों के अलावा आजकल देश में बहुत से भाहर भी उच्च शिक्षा के केन्द्र के रूप में अपनी पहचान रखने लगे हैं। भारत में चेन्नई, मुम्बई, दिल्ली, कोलकाता, कानपुर, बनारस आदि भाहर उच्च शिक्षा के बड़े संस्थान वाले भाहरों के रूप में अपनी साख बना चुके हैं। नब्बे के दशक में कुछ गिने-चुने देशों में ही भारतीय विद्यार्थी पढ़ने के लिए जाया करते थे, लेकिन आज यूरोप के तमाम देशों के साथ ही अमेरिका, न्यूजीलैंड, आस्ट्रेलिया और चीन सहित 40 से भी ज्यादा देशों में लगभग साढ़े चार लाख भारतीय छात्र पढ़ रहे हैं।<sup>1</sup>
- स्वास्थ्य लाभ और विश्राम :- अवकाश के दौरान प्रतिदिन के सामाजिक दबावों से मुक्त होकर भान्त, पहाड़ी, प्राकृतिक स्थान पर जाकर विश्राम करने और वहाँ स्वास्थ्य लाभ लेने की सोच पर्यटन प्रेरणा का कार्य करती है। इसके अलावा अब तो बहुत सारे स्थल ऐसे हो गए हैं, जहाँ बेहतर चिकित्सा सुविधाएँ, प्राकृतिक स्रोत हैं। इन स्थानों पर घूमने जाने के साथ बीमारी का इलाज कराने के लिए भी लोग पर्यटन की राह पकड़ते हैं।
- विशेष रुचियाँ :- बहुत से लोग विशेष रुचियाँ, खेल आदि के भौक की पूर्ति के लिए निवास स्थान से बाहर जाना चाहते हैं। जैसे कुछ लोग इतिहास में रुचि रखते हैं तो ऐतिहासिक स्थल पर जाना उनकी रुचि रहती है, कुछ ऊँटों, हाथियों, खच्चरों और जीवों की सहायता से पहाड़ पर दुर्लभ स्थान पर जाकर जीवन का आनंद लेना चाहते हैं तो कुछ तम्बुओं में रात बिताना चाहते हैं। कुछ गोल्फ, कोर्फबॉल आदि खेलों के प्रति आकर्षित होकर निवास स्थान से बाहर निकलते हैं। रोमांच, वन्यजीवन, ग्रामीण जीवन, अतीत की विरासत में जीना आदि बहुतेरी विशिष्ट रुचियाँ भी भ्रमण एवं यात्रा का बड़ा कारण हैं।
- बाजार, मेला, सम्मेलन एवं प्रदर्शनी :- बहुत से भाहर आज भी ऐसे हैं जो अपनी खास वस्तुओं के बाजार के लिए प्रसिद्ध हैं। ऐसे स्थानों पर लगने वाले बाजारों पर जाकर वहाँ खरीददारी के आकर्षण, समय – समय पर लगने वाले मेलों यथा जैसलमेर का मरुमेला, बीकानेर का ऊँट उत्सव, जगन्नाथ रथयात्रा मेला आदि अवसरों पर वहाँ जाने का आकर्षण लोगों को रहता है। समय – समय पर लगने वाले मार्ट भी पर्यटन प्रेरणा की वजह बनते हैं।
- प्रोत्साहन भ्रमण :- टेलीविजन, रेडियों के साथ-साथ प्रिंट मिडिया भी ऐसी बहुत-सी प्रतियोगिताओं का आयोजन करता हैं जिनमें विजेता रहने पर किसी आकर्षक पर्यटन स्थल पर दो दिन-तीन रात्रि, सात-आठ दिन रात्रि ठहरने के पैकेज आदि के बारे में प्रोत्साहन दिया जाता है। पर्यटन प्रोत्साहन के ऐसे आकर्षक ऑफर आजकल प्रिंट, एवं इलेक्ट्रॉनिक मीडिया में आम बात हैं। यही नहीं सार्वजनिक एवं निजी कंपनियाँ भी आजकल अपने अधिकारियों, कर्मचारियों को बोनस, अधिक लक्ष्य अर्जन के लिए आकर्षक स्थल पर सैर, वहाँ रहने, खाने-पीने के अवसर प्रदान करती हैं। प्रोत्साहन भ्रमण दरअसल आज पर्यटन के प्रति आकर्षण की बड़ी वजह है।

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